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Addressing Drug Misuse on a College Campus: An Academic and Resource Driven Approach

Deborah Ebbinghaus
Butler University

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Applicant Deborah Christena Ebbinghaus
(Name as it is to appear on diploma)

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Read, approved, and signed by:

Thesis adviser(s) Chad Knoderer 5/9/2019
Date

Date

Reader(s) 5/9/2019
Date

Date

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Addressing Drug Misuse on a College Campus: An Academic and Resource Driven Approach

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Deborah Christena Ebbinghaus

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Introduction

In recent years it has become almost impossible to avoid hearing about drugs, drug dependence, drug overdoses, and drug-related deaths. Indiana has received national attention for opioid dependence and overdose. However, opioids are not the only drugs in the limelight. References to Adderall and Xanax commonly appear in music, films, TV shows, and books.

The climate of having a pill for nearly everything and nearly every problem can hide the truth that medicines are dangerous if used improperly. Simply because a drug can be prescribed by a medical professional does not make it harmless. Over-the-counter drugs, while viewed as safer, are not benign substances. The national Poison Control Center data from 2017 revealed that 4.34% of human exposure consults were due to antihistamines, 2.22% due to cold and cough preparations, and of human fatalities acetaminophen alone accounted for 4.29% of cases, acetylsalicylic acid alone 1.44%, and NSAIDs 1.23%.[1] In 2016, non-opioid accidental exposures and poisonings to drugs led to 54,783 deaths in the United States, of which 4,792 (11.4%) were people between the ages of 15 to 24.[2] In 2011, 28% of drug-related emergency department visits were due to pharmaceuticals.[3] In 2009, 27.1% of such visits were due to over-the-counter medications.[4]

The United States, particularly the Midwest, witnessed the results of overprescribing of opioids: epidemic. Many people began with legitimate prescriptions for their pain, developed a tolerance to their dose—needing higher doses of their medication for the same effect—became dependent upon their medication, and when some factor—cost, lack of prescriptions, insufficient amount of medicine, "insufficient" dose—arose then transitioned to using heroin.[5] Overdose rates soared, as did deaths. It was not an epidemic of just one area or one demographic. However, unlike previous drug epidemics such as the crack epidemic of the 1980s that heavily

hit African American communities, the most at risk for heroin addiction were eighteen- to twenty-five-year-old, non-Hispanic white males.[4]

There are volumes of literature related to drug misuse. However, the terminology is not consistent throughout different organizations in the United States and globally. The United States clings to the outdated term "abuse," rather than using "misuse" or the ICD-10 language of "harmful use" and "hazardous use."[6] The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, more commonly known as the DSM-V, is published by the American Psychiatric Association to help define and classify mental disorders. It, too, has shifted its lexicon away from "substance abuse" and "substance dependence" as seen in earlier editions of the manual, instead now defining various "substance use disorders."[7] The World Health Organization (WHO) still defines substance misuse as the "use of a substance for a purpose not consistent with legal or medical guidelines" and substance abuse is defined as "nonmedical or unsafe patterns of use, irrespective of consequences."[6]

Since 1975 the National Institute on Drug Abuse (NIDA) has funded the annual Monitoring the Future (MTF) survey conducted by the University of Michigan.[8] It inquires about drug and alcohol use and attitudes among high school students nationwide with follow-up surveys in college and adulthood. Research from MTF has found many trends about substance use and its data is frequently used in and for comparison with other studies. One such general trend is that for almost any illicit drug, lifetime prevalence is higher in an older age group.[9] MTF closely examines results by age. In the 2016 report, those in their early twenties had the highest annual and current use for nearly every drug.[9]

On a much smaller scale, the Indiana Collegiate Action Network (ICAN) has been conducting the Indiana College Substance Use Survey (ICSUS) since 2009, "to provide

meaningful data at both the campus and state levels, to understand substance use problems and develop effective plans for reducing substance use by college students."[10] The survey is sent electronically to selected students through a URL and remains active for two weeks. Each campus that participates in the survey receives an individualized report and may include up to ten questions specific to its school that are not included in the statewide report. ICAN publicizes the statewide annual report on the Indiana Prevention Resource Center website where previous years' reports are also maintained. Butler University typically participates in ICSUS every other year and has done so since 2009. The 2016 ICSUS survey indicates that on Butler's campus students used less prescription painkillers (0.8% vs. 5.2%) and sedatives (1.9% vs. 2.2%) that were not prescribed to them than the Indiana average.[11] The rate of prescription stimulant use was equal to the state's rate at 5.2%.[11] However, in the same year, of the Butler students who had ever used prescription stimulants, painkillers, and sedatives without a prescription of their own, the survey indicated that they used more frequently than the Indiana state average (68.3% vs. 56.9%, 45.5% vs. 35.6%, 68.4% vs. 49.0%).[11]

Given the trends of drug misuse in the United States, Indiana, and Butler University, an examination of drug misuse in college-aged students was warranted. This examination is comprised of three components with the purpose of improving the resources available to the Butler Community, specifically students, faculty/staff, and parents, to address and prevent drug misuse. This examination looked for trends such as the rationale behind nonprescription drug use and the outcomes of use, examined the current policies, procedures, and resources at Butler University regarding nonprescription drug use from an academic, health, and conduct perspective, and communicated its findings. The three components are a literature analysis, a needs assessment, and resource development. Due to the abundance of programming already in

existence at the University level, alcohol was not included in the focus of this project. Similarly, cannabis was not specifically addressed due to the variability of regulation in students' home states and other campus efforts in existence. Therefore, the primary focus of this project was prescription drug misuse.

The literature analysis examined journal articles published no earlier than 2010 on drug misuse in college-aged persons. As a continuation of the literature analysis, the 2012–2018 ICSUS statewide reports and Butler-specific reports were examined. The needs assessment looked at Butler University's current policies and procedures on drug misuse at the university, college, departmental, program, and course level, including athletics as publicly available through the University website. It also examined the resources on the University website and Health Services.

After examining the literature, ICSUS results, and needs assessment results, this project condensed the information into proposed changes for the University and sample resources for parents, students, and faculty/staff.

University Context

Butler University is a private, liberal arts university in Indianapolis, Indiana.[12] There are approximately 4,200 undergraduates and 850 graduate students at the University.[13] Its undergraduate population is approximately 60% female, averages twenty years old, and 35% Greek affiliated.[13,14] Racially, the campus identifies as 82.6% white, 3.9% black, 3.7% Hispanic/Latino, 3.3% Asian, and 3% two or more non-Hispanic races.[13] By religion, students identified as 34.7% Catholic, 18.6% Protestant, 12.7% Evangelical Protestant, 5.6% Orthodox, 5% Agnostic, 4.8% nonreligious, 4.7% atheist, 2.8% Jewish, 2.7% Mormon, 1.4% Muslim, and 0.6% Buddhist.[15] It has colleges dedicated to the liberal arts and sciences, business, education, arts, communication, and pharmacy and health sciences.[12]

Pharmacology of Commonly Misused Medication Classes Context

Stimulants

Central nervous system stimulants are most commonly used in the treatment of attention deficit/hyperactivity disorder (ADHD), but are also used for narcolepsy.[16–18] Common prescription stimulants include methylphenidate (Ritalin, Concerta), dexmethylphenidate (Focalin), mixed amphetamine salts (Adderall), dextroamphetamine, lisdexamphetamine (Vyvanse). The narcolepsy medications falling under this category are armodafinil (Nuvigil) and modafinil (Provigil).[17] Other stimulants include substances such as caffeine, ephedrine, and cocaine. Side effects can include decreased appetite, insomnia, headache, and irritability. These medications have the potential for tolerance, dependence, psychoactive effects, and euphoria and due to these, the potential for misuse.[16–19] The ADHD medication atomoxetine (Strattera) is not a stimulant and has no abuse potential due to an alternate mechanism of action.[16]

Sedatives/Anxiolytics/Tranquilizers

Anxiolytics and tranquilizers are used to treat anxiety, and sedatives are used to promote sleep.[17,20] The most common anxiolytic drug category is benzodiazepines. Examples are diazepam (Valium), chlordiazepoxide (Librium), alprazolam (Xanax), lorazepam (Ativan) and clonazepam (Klonopin). Longer acting benzodiazepines and other similar acting drugs can also be used for their sedative property, these include drugs such as eszopiclone (Lunesta), zolpidem (Ambien), and temazepam (Restoril). Side effects of these drugs are drowsiness, sedation, amnesia, dependence, withdrawal, and therefore the potential for misuse.[20,21]

Another far less utilized sedative category are the barbiturates which include amobarbital, butabarbital, pentobarbital, phenobarbital, and secobarbital.[21,22] They have a high potential for tolerance, dependence, toxicity, and therefore abuse and withdrawal and overdose.[22]

Analgesics

Analgesics are used to treat physiologic pain.[23] Pain can be simply classified into three types: acute, chronic, and malignant/cancerous. There are many types of analgesics that target different pathways to alleviate pain. Example non-opioids include the nonsteroidal anti-inflammatory drugs (NSAIDS) aspirin, ibuprofen, diclofenac, naproxen, ketorolac, celecoxib, meloxicam, and the non-NSAID, acetaminophen.[23,24]

Opioids are the other major class of analgesics.[23] They vary in potency and have the potential for tolerance, dependence and due to their potential to cause euphoria, addiction and misuse. Common opioids include morphine (MS Contin), codeine (Tylenol-Codeine No. 3), oxycodone (OxyContin, Percocet), hydrocodone (Lortab, Norco, Vicodin), buprenorphine, fentanyl (Actiq,

Sublimaze), and methadone. Side effects may include constipation, nausea and vomiting, sedation, more dangerously decreased breathing.[23]

Literature Review

Abbreviations

aOR= adjusted odds ratio
OR= odds ratio
SUD= substance use disorder
AUD= alcohol use disorder
CUD= cannabis use disorder
ODUD= other drug use disorder
CI= 95% confidence interval
CTE= childhood trauma exposure
ADHD= attention-deficit/hyperactivity disorder
SD= standard deviation
MTF= Monitoring the Future National Survey
GPA= grade point average

Stimulants

Ross et al. wanted to assess college students' perceived benefit-to-risk tradeoffs for the nonmedical use of prescription stimulants and to identify distinct subgroups with differing nonmedical use of prescription stimulants priorities.[25]. The study designated attributes to one of four domains: performance enhancement (better grades, meeting deadlines, fulfill nonacademic responsibilities), punitive consequences (expelled from college, limit future career opportunities, could get arrested), health-related (negatively affect health, become dependent, able to skip meals), and social (parents' disapproval, friends okay with nonmedical use of prescription stimulants, more fun partying). Based upon their responses, participants were then categorized by best-fit analysis as assuredly performance driven, cautiously grade/career oriented, risk-averse, or recreational. The study had students report generalized college majors as science and engineering, science- and engineering-related, business, education, arts, humanities, or other.[25]

The study population was 57% female, 66% white, 76% from the state of Maryland, with mostly upper-class students (32% juniors, 39% seniors), 47% being financial aid recipients, and 36% scholarship recipients.[25] Fifty-one percent of respondents were science and engineering majors with 15% being in science- and engineering-related majors. When asked how the respondents obtained stimulants, 74% reported a friend gave them stimulants for free and 49%

reported purchasing them from friend or family. Forty-five percent of the respondents thought they had ADHD, but only 19% were diagnosed with ADHD. Only 22% of the sample had ever been prescribed a stimulant, yet only 19% of those had a current prescription.[25]

At survey participation, 46% had used prescription stimulants without a prescription less than one month ago, 37% between one and six months ago, and the remaining 18% had used between seven to twelve months ago.[25] A majority (61%) reported that they used one or less times in the past month, with 31% indicating using two to five times, and 8% indicating six or more times. Looking at past-year use, many respondents (36%) indicated they used two to five times, with rates for using prescription stimulants eleven to twenty times and twenty-one or more times being similar at 17% and 16%, respectively. However, 12% indicated that they had only used once in the past year.[25]

Students reported using prescription stimulants for academic purposes, socializing/ partying, weight loss, and athletics.[25] The majority of respondents (70%) indicated that they had not nonmedically used opioids or antianxiety medications in the past year.[25] The most important motives for non-prescribed stimulant use overall were better grades, meeting deadlines, followed by getting expelled, and career limitations. The least important motives included having more fun partying, being able to skip meals, and friends being okay with the nonmedical use of prescription stimulants.[25]

Cautiously grade/career oriented was the most common classification among respondents (117 people, 45.2%).[25] They were most concerned with grades, deadlines, getting expelled, and future career opportunities. Held in least important were having more fun partying, friends being okay with nonmedical use of prescription stimulants, and skipping meals. In this study, this group was most likely to major in science/engineering.[25]

The assuredly performance-driven group (64 respondents, 24.7%) was most concerned about grades, deadlines, and nonacademic responsibilities.[25] They held getting arrested, becoming dependent, and skipping meals as least important. The assuredly performance driven students used prescription stimulants nonmedically more frequently in the past month ($p=0.04$) and in the past year ($p=0.01$) than the other groups. They also were most likely to purchase stimulants from either friends or family ($p=0.04$) or from a stranger ($p=0.01$).[25]

The risk-averse group was comprised of sixty-four respondents (24.7%).[25] They were most concerned about getting expelled, grades, getting arrested, and their future career opportunities. Like the cautiously grade/career-oriented group, the least important motives for this group included having more fun partying, skipping meals, and having friends okay with the nonmedical use of prescription stimulants. The risk-averse participants were most likely to have academic scholarships ($p=0.02$) of the different motivational groups.[25]

Finally, the smallest group, the recreational group, was comprised of fourteen subjects (5.4%).[25] They, on average, held most important having more fun partying, getting arrested, and getting expelled. The least important motive was being able to skip meals. The recreational group was most likely to have nonmedically used prescription stimulants for socializing/partying in the past ($p<0.0001$) and the least likely to report academic motives ($p<0.0001$).[25]

Watkins conducted two studies from the same data. The survey was conducted in January of 2012 about the prior fall 2011 semester activities at a large Southern university.[26,27] Participants came from randomly selected upper- and lower-level classes in each college. The study sample included 841 students: 52.6% female, 61.1% white, 10% affiliated with Greek life, with an average age of 21.02 years (SD 3.42).[26,27]

The first study examined the motivations for prescription drug use.[26] The different responses respondents could select were categorized as recreational (intent had nothing to do with intended medical purpose), instrumental (intent corresponds with medical purpose of drug), or mixed motivational. Correspondingly, the respondents were classified as recreational, instrumental, or mixed-motive users based upon their responses. The study also included questions about the subjective strain experienced by a participant as measured by the Inventory of College Student's Recent Life Experiences (ICSRLE) and assessed for negative affective states such as anxiety, depression, and anger.[26]

The study found that 4.3% of respondents misused prescription drugs solely for recreation and thereafter added them to the mixed motive group (18.4% alone) for analysis, therefore the recreational/mixed motive group comprised 22.7% of respondents who participated in prescription drug misuse.[26] The remaining 77.3% of respondents had instrumental motives. Looking at the motives for prescription drug misuse, the instrumental users' most common response was "because it helps me study" (44.8%) followed by "because it helps relieve pain" (34.5%). For recreational users, 14.3% of respondents indicated that they misused prescription drugs for experimentation and 10.8% indicated use because it gets them high.[26]

The combined recreational/mixed motive group was 4.715 times ($p<0.001$) more likely to indicate past semester prescription drug misuse than instrumental users if they used other drugs (drugs other than marijuana, alcohol, and prescription drugs).[26] Instrumental users were more likely to be female, in a social fraternity or sorority, have a higher percentage of friends who participated in prescription drug misuse, and to perceive more positive prescription drug experience. In the recreational/mixed group, the past semester use of other drugs was eight times more likely (OR 8.043; $p<0.01$) if they used other drugs. They were also at an increased

likelihood to have more friends who participated in and positively view prescription drug misuse (OR 2.850, $p<0.01$; OR 2.326; $p<0.01$, respectively). There were no major findings from the data on respondents' reported strain or anger.[26]

The second study by Watkins using the previously described data from a large Southern university examined the social learning theories of differential association and differential reinforcement and their role in prescription drug misuse among college students.[27] Briefly, differential association, as the author quoted from Sutherland's 1947 theory, is "that criminal behavior, like all behavior, is learned through interaction with others." This was asked about by the estimation of how many of the participants close friends misuse prescription drugs and how much time is spent with them. Differential reinforcement is then "the procedure of evaluating the different rewards and punishments that can possibly stem from committing an act" which can be positive (rewards) or negative (punishments). This was evaluated with questions about the effects, risk, and attitudes of prescription drug misuse. There were similar rates of past semester misuse of prescription stimulants (12.4%) and pain medications (12.1%). Any type of prescription drug misuse was reported by 24.4% of respondents. About 87% indicated none to only some of their friends misused prescription drugs. About 30% agreed or strongly agreed that prescription drug misuse was acceptable in college students. However, 50% of the sample indicated they perceive a negative experience with prescription drug misuse. This further revealed approximately 25% of respondents believed that prescription drug misuse carries heavy risk, while only 7% held that it has little or no risk.[27]

Social Greeks were more likely to have participated in past-semester prescription drug misuse, particularly for stimulants.[27] This study did not find race to be a significant predictor for prescription drug misuse. Yet, if a respondent indicated that they had a larger number of peers

who participated in prescription drug misuse, especially stimulants, past semester misuse increased. Similarly, it also found that the more time spent with friends who participate in prescription drug misuse, and more so with stimulants, misuse increased. Having a "positive" prescription drug misuse experience generally increased the respondent's prescription drug misuse and this theme continued across the categories of stimulants, pain medications, and other drugs (tranquilizers, antidepressants, and sleep medications). If a participant saw prescription drug misuse as risky, they had a 21.2% decrease in odds for prescription drug misuse (OR 0.788, $p<0.05$).[27]

An exploratory study by Schultz, Silvestri, and Correia aimed to look at the norms of nonmedical use of prescription stimulants of students with current prescriptions for a stimulant.[28] The study population's demographics were 73.8% female, 88.4% white, averaging 20.32 years of age, and 44.1% of participants were affiliated with Greek life at a large Southeastern university. Of these respondents, 121 had a current prescription for a stimulant. The prescription holders' demographics were: 72.7% female, averaging 20.8 years old, 95.9% white, and 61.1% social Greek members.[28]

Participants who had a stimulant prescription were asked about the incidence of diversion and the approval of certain behaviors including abstaining from using stimulants other than prescribed and using non-prescribed stimulants once or twice, occasionally, or regularly. The questions also asked about the level of approval of these actions from close friends, parents, and a typical university student.

The study found that 43.8% of prescription holders had diverted their medication at least once in their lifetime.[28] Prescription holders who had diverted consistently believed others approved of nonmedically using prescription stimulants more than non-diverters across close

friends' beliefs on occasional or use once or twice, whereas prescription holders who had never diverted were significantly more likely to believe that their close friends believed it was never okay to nonmedically use prescription stimulants. Correspondingly, across the categories of self, close friends, parents, and a typical university student, the students who diverted their medication approved significantly more in nonmedically using stimulants for focus, studying, staying awake to study, to be more productive, and to increase alertness than those who had never diverted their stimulant medication.[28]

A study by Arria et al. looked at the perceived academic benefit of nonmedical use of prescription stimulants to improve grades.[29] The study asked participants for the number of days per student they nonmedically used prescription stimulants in the past six months and required a Likert-scale response from strongly disagree to strongly agree to the statement "Prescription stimulants will help people without a prescription get better grades."

Past six-month nonmedical prescription stimulant use was reported by 11.2% of the sample.[29] Over a quarter of respondents (28.6%) believed the nonmedical use of prescription stimulants could help students earn higher grades (23.3% agree, 5.3% strongly agree); while 38% were unsure (neutral). In misusers, 64.9% believed in misusing for better grades (45% agree, 19.9% strongly agree). Even 20.6% of non-misusers agreed, with another 3.5% strongly agreeing, while 39.6% remained unsure about misusing for better grades. Students who perceived higher academic benefit from using stimulants were significantly more likely to misuse.[29]

The study also ran a post-hoc alternative model comparing the various levels of perceived academic benefit to see if differences in opinion affected stimulant misuse rates. Students who disagreed and strongly disagreed had results that were not significantly different for nonmedical use of prescription stimulants use (aOR 1.57, CI 0.95-2.57, $p<0.077$).[29] However, for those who

were unsure about the academic benefit of nonmedically using prescription stimulants versus those who disagreed (aOR 1.89, CI 1.41-2.54), agreed versus unsure (aOR 2.52, CI 2.10-3.03), and strongly agreed versus agreed (aOR 2.14, CI 1.67-2.74) the comparisons were all significant ($p<0.001$) for an increase in odds of nonmedical use of prescription stimulants use.[29]

Past literature found students who nonmedically use prescription stimulants have lower GPAs, skip classes more, use drugs more, and drink more than nonusers. In light of this, Arria et al. used two years of consecutive data from the College Life Study to see if college students improved their grades by using prescription stimulants nonmedically. The College Life Study is an ongoing longitudinal prospective study of college students from a large, mid-Atlantic public university. It has followed the same 1,253 people since 2004, the year they were collegiate freshmen.[30] Year 1 is the baseline year and is defined as the school-year from 2004-2005, during which prior to college data was collected. The sample population is 52% female and 72% non-Hispanic white.[31] This particular study focused on students who had never been diagnosed with ADHD. To quantify nonprescription stimulant use's effect on grades the study examined GPA as reported from the university's records. The researchers specifically investigated the effect of the initiation of nonmedically using prescription stimulants on GPA versus nonusers and the effect of discontinuing the nonmedical use of prescription stimulants on GPA versus continuing to use.[31]

Data were collected on race/ethnicity, sex, and mean income by zip code of residence during the last year of high school of the sample population. The average income in $10,000 increments was 7.3 (SD 3.3), 72.8% of respondents where white, and 46.3% were male.[31] The study found that 68.8% of participants had never engaged in nonmedical use of prescription stimulants in Years 2 or 3 and were classified as "abstainers." "Persisters" were those 53.6% (16.7% total

sample) who participated in non-prescribed stimulant use in both Year 2 and Year 3. The 8.7% of the sample who participated in nonmedical use of prescription stimulants only in Year 3, but not Year 2 were called "initiators;" while the 5.8% of the total sample who used prescription stimulants during Year 2, but not Year 3 were called "desisters." It was noted by the authors that whites were overrepresented in the initiator and persister groups.[31]

Identifying as white and neighborhood income were significant for nonmedical use of prescription stimulants use (p-values <0.004).[31] The frequency, in days of use, for persisters was significantly more than that of either initiators (4, SD 4.2 vs. 13.6, SD 15.3) or desisters (3.4, SD 3.8 vs. 11.7, SD 15; p-values <0.001). GPAs did not significantly change (p>0.08) in this study after adjusting for sex and Year 2 GPA. The average GPA change in the initiator and persister groups was negative (-0.0249 and -0.0248), but not significant from zero. The abstainer group was the only group to have a small significant increase in GPA (mean +0.05; CI 0.02-0.08), while desisters' average GPA's changed by +0.016.[31]

Donaldson, Siegel, and Crano did not directly examine the effects of stimulants on GPAs. Instead, they examined the relationship between attitudes, actions, and the level of vested interest someone has.[32] The authors' defined the vested interest theory as "people act in attitude-consistent ways when the outcome of the attitude-implicated behavior is deemed both important and hedonically relevant." The study recruited college students by Amazon's MTurk, a crowdsourcing platform.[32]

The vested interest statements were phrased as "It would be in my best self-interest to use prescription stimulants nonmedically to…" and then followed by an example such as: "allow me to be more focused on something," "help me concentrate better," "make my focus crystal clear," "help me pay attention really well," or "help me get my work done more efficiently."[32] The full

sample included participants aged nineteen to forty-nine years and then was divided into a younger subset sample of ages nineteen to twenty-nine. All models had significant findings in both age groups ($p<0.001$) for vested-attitudes and intentions. Non-vested persons' attitudes were not significantly related to their intentions.[32]

Bavarian, Flay, Ketcham, and Smit's study wanted to look at the characteristics associated with the illicit use of prescription stimulants using the theory of triadic influence.[33] This theory looks at the level of control of different influences impacted by ultimate, distal, proximal, and immediate causes. The study demographics were 79% white, 55.2% female, 92.3% under the age of twenty-five, and 99% full-time students.[33]

The study used the Behaviors, Expectancies, Attributes, and College Health Questionnaire (BEACH-Q) score for psychometric analysis and the theory of triadic influence to examine the effects of intrapersonal, social situation/context, and sociocultural environment influences.[33] From the study sample, the overall illicit prescription stimulant use rate was 25.6% per academic term, with 52.9% of users reporting they had used one to two times, 24.4% had used three to five times, 9.2% had used six to nine times, 5% used ten to nineteen times, and 5% had used twenty to thirty-nine times. Predominantly (70.6%), students reported they initiated use in college. The most common routes by which the respondents indicated they had taken stimulants were oral (93.7%) and intranasal (20.8%). Respondents reported they had obtained drugs from friends, acquaintances, and themselves. The majority of the sample (67.7%) agreed or strongly agreed that they experienced the outcome from illicit use of prescription stimulants they desired (47.2% agree, 20.5% strongly agree). The rate of use significantly increased from the first year to the third year and fourth years of college (3^{rd} year aOR 3.56, 4^{th} year aOR 5.68, 5+ OR 5.25). Grades were self-reported in this study. Students receiving "A" letter grades were less likely to use

prescription stimulants than students receiving “B” or “C” grades. Greek life members were not shown to be more likely to illicit use of prescription stimulants than non-members.[33]

In this study students who lived in campus housing were significantly less likely to illicit use of prescription stimulants in all models, the aOR for social influences 0.23 (CI 0.10-0.51, $p<0.01$).[33] At the study university, only first year students are required to live on campus and fraternity and sorority houses are not included as on-campus residences. Varsity athletes had higher odds of illicit use of prescription stimulants in all models.[33]

Munro et al. conducted a study on the relationship between the nonmedical use of prescription stimulants, executive functioning, and academic outcomes.[34] Executive functioning was defined as the, “underlying cognitive abilities that allow for strategic planning, cognitive flexibility, self-regulation, and goal-directed behavior.” The study survey was comprised of the Stimulant Survey Questionnaire (SSQ) and the Barkley Deficits in Executive Functioning Scale for adults (BDEFS). Higher BDEFS scores indicate higher deficiencies/worse executive functioning scores. The BDEFS has five sub-scales: self-management of time; self-organization and problem solving; self-restraint; self-motivation; and self-regulation of emotion. However, this study focused on total executive functioning scores, not subscales.[34]

The mean age was 20.77 years (SD 3.59).[34] Respondents were mainly female (73.4%) and white (74%). The study asked about diagnosed mental health conditions and found that within their sample, 32.1% of respondents were diagnosed with anxiety, 27.6% with depression, 7.8% with an eating disorder, 3.2% had a specific learning disability, 12.7% had ADHD, and 59.4% were without any psychiatric conditions. Students’ self-reported GPAs averaged 3.29 on a four-point scale.[34]

Overall, 18.8% of the survey sample reported lifetime nonmedical use of prescription stimulants. The reasoning for use was most commonly to "perform better in my schoolwork," "focus better in class," and "perform better on tests."[34] There was no significant difference between males and females (p=0.401), with 17.9% of females and 22% of males having used. The participants knew other students who had nonmedically used prescription stimulants "while studying" (71.4%), who used "during finals week" (70.5%), and who used "during tests" (62.7%). Respondents agreed (44.1%) that stimulants were easy to get on campus.[34]

Nearly two-thirds of the sample had average executive functioning scores, but slightly more than one-third of the study respondents had clinically significant scores indicating an executive function deficit.[34] A small percentage of respondents (7.1%) agreed that "using prescription stimulants daily is harmless" and 24.7% agreed that "using prescription stimulants occasionally is harmless." The rate of misuse increased with each increasing year in university, with freshmen reporting 10%, sophomores at 14.9%, juniors at 22.4%, and seniors at 25%. There were statistically significant group differences between those with clinically significant executive functioning deficits and those without. Nonetheless, Munro et al. did not find a significant impact on GPA with nonmedical use of prescription stimulants.[34]

Wilens et al. conducted a controlled study of collegiate stimulant misusers' neuropsychological functioning utilizing an extensive survey.[35] The study assessed executive functioning using the Behavior Rating Inventory for Executive Functioning-Adult Version (BRIEF-A), which is comprised of the Behavioral Regulation Index (BRI) and the metacognition index (MI). The BRI assesses for higher level capability to regulate behavior and emotions using inhibit, shift, emotional control, and self-monitor scales. The MI assesses the effective use of planning, organization, and problem solving and uses five scales titled: initiate, working

memory, plan/organize, task monitor, and organization of materials. The MI and BRI together make the Global Executive Composite (GEC). High scores in any area of the BRIEF-A indicate more severe executive dysfunction. The neuropsychological assessment portion of the survey used the Cambridge Neuropsychological Test Automated Battery (CANTAB) computerized test. It also tested IQ using the Wechsler Abbreviated Scale of Intelligence (WASI-II). The researchers estimated lifetime stimulant misuse frequency values from an answer to another question from the MGH Medication Misuse and Diversion Assessment, which was included in the survey.[35]

The BRIEF-A results showed that misusers had higher GEC scores and had more dysfunction than the controls for BRI and MI.[35] Misusers without ADHD diagnoses also significantly scored higher in the categories of inhibition, self-monitor, initiation, working memory, and plan/organize ($p<0.05$). Even with an ADHD adjustment analysis, the inhibition and working memory scales and MI remained significant. The CANTAB scores with ADHD included in the model showed that males' rapid visual information processing (RVP) score, a measurement of sustained attention, and AGN, which tests information processing biases for positive and negative stimuli, were significant. There were no significant differences on the full-scale IQ between users and misusers. Though, on the WAIS-IV subscale (Wechsler Adult Intelligence Scale) misusers were more likely to score lower on Digit Span, Letter Numbering Sequencing, and working memory index. The study concluded that "stimulant misusers may be less adept at maintaining and organizing information in working memory, strategically planning and executing a response, and making necessary changes based on outcome."[35]

Geisner et al. wanted to explore the relationship between stimulant use and gambling in college students. The study included multiple screening tools including the South Oaks

Gambling Screen (SOGS) to look at lifetime gambling disorder risk (a score of 3-4 is considered "at risk" for gambling disorder, a score of 5 or more is considered a 'probable pathological gambler'), the Gambling Problem Index (GPI), and the Gambling Quantity and Perceived Norms Scale (GQPN), which evaluate the amount of money gambled.

The participants of the study were college students from a large West coast university.[36] Of the 4,640 responses, 199 were enrolled in the longitudinal trial which required a score of three or more on the SOGS, one or more on the GPI, and meeting abuse/dependence criteria for alcohol/other substance. One-hundred fifty-nine participants were retained at the twelve-month follow up.[36]

The screening sample was 59.2% female, averaging 19.8 years of age (SD 1.5 years), 57.4% white, 28.5% Asian, 1.2% black, and 12.9% multiracial or other.[36] The majority were juniors (33.2%), followed by sophomores (23.1%), seniors (23%), and freshmen (20.5%). The longitudinal group was 62.8% male, averaging 20.1 years of age (SD 1.4 years), 53.3% white, 28.5% Asian, 1.2% black, and 18.3% multiracial or other. This sample was also comprised of a majority of juniors (34.2%), followed in prevalence by seniors (25.3%), sophomores (22.1%), and freshman (18.1%). Both were similar to the study's campus make up.[36]

Of the screening sample, 4.4% had a score of three of more on the SOGS based upon gambling activity within the last six months and 8.3% had used stimulants in the past three months.[36] Problematic gambling rates were higher in people reporting higher recent stimulant use versus those who did not use stimulants. In the longitudinal sample, 21.2% of participants had used stimulants at baseline. Baseline recent stimulant use was significant for increased frequency of gambling at twelve months.[36]

Benson and Flory examined a different psychological component, the symptoms of depression, and ADHD in relation to stimulant medication misuse among college students in the spring semester of 2014 at a Southeastern public university.[37] The study measured ADHD symptoms with the Current Symptoms Scale (CSS), depression symptoms with the Center for Epidemiological Studies Depression Scale Revised (CESD-R), as well as stimulant medication use in the past twelve months.[37]

The study found a significant correlation between ADHD and depression symptoms ($r=0.51$; $p<0.001$).[37] Students averaged 3.43 ADHD symptoms (SD 4.32) and 12.36 (SD 11.64) depression symptoms. Overall, 23% of respondents had misused stimulants in the past year, 22% of whom had misused without having a prescription. Of the 11% of the study population with a prescription, 33% stated that they had misused: 23% had taken too much of their medication, 16% took it took too frequently, 11% had snorted it, and 15% had mixed their medication with other drugs. Eighteen percent of participants met criteria for a diagnosis of ADHD and 29% met the clinically significant cut-off for depression as defined as greater than or equal to a score of sixteen on the CESD-R.[37]

As an independent variable and as a continuous variable without ADHD included, depression was significant (OR 1.024; 95% CI 1.010-1.038; $p<0.001$ and OR 1.635, 95% CI 1.154-2.318, $p=0.006$). Although when ADHD was added to the model it was not. However, in the two different models with ADHD symptoms included students were more likely to misuse for each additional ADHD symptom.[37] The depression symptoms that correlated closest with stimulant misuse overlapped with ADHD symptoms. These included trouble concentrating, fidgety, and an inability to focus.[37]

Gallucci, Hackman, and Wilkerson took a different approach to stimulant misuse by examining the relationship between religious coping and the misuse of prescription stimulants. Prior studies had shown religiosity has to be a protective factor and participation in organized religious activities to create a social support system that dissuades substance use. Religious coping can be positive (seeking support, focus) or negative (disconnect, reprisal). Positive coping is associated with decreased unhealthy behaviors, negative coping with the opposite effect. Past studies have shown mixed results: academic success overrode religiosity and religiosity is protective unless the person is in a social fraternity or sorority.

The average respondent age was 19.78 years (SD 1.38), 623 (68.8%) respondents identified as Caucasian, 634 (69.8%) as female, 298 (32.8%) as being affiliated with Greek life.[38] Regarding religious affiliation, 311 (34.4%) identified as Nondenominational Christian, 188 (20.8%) as Protestant, 173 (19.1%) as Catholic, 14.6% as atheist/agnostic, 1.4% as Buddhist, 1.1% as Muslim, 2.3% as Orthodox Christian, and 4.2% as other.[38]

One-hundred and fifty-eight (17.4%) respondents had misused a stimulant medication in the past year.[38] Higher rates of prescription stimulant misuse were seen in participants affiliated with Greek life, males, and students with prescriptions for stimulants were more likely to misuse. Positive religious coping scores measured by the Brief RCOPE scale (maximum score 28) were higher for nonusers (17.67± SD 7.32) than for users (15.76± SD 6.41) indicating and stronger "extent to which a participant has a secure relationship with a transcendent force, a sense of spiritual connectedness, and a compassionate world view" as the authors' quoted from the creators of the scale.[38] The relationship between positive religious coping and prescription stimulant misuse was significant ($p<0.001$). Higher positive religious coping scores were associated with decreased prescription stimulant misuse in the past year. Correspondingly, more

frequent attendance at organized religious events was seen in those who did not misuse than those who misused (2.39±1.44, 1.93±1.27, $p<0.001$) and a decreased likelihood of misuse was seen with increased frequency of attendance. Positive religious coping and organized religious activities frequency were significantly correlated ($r=0.74$). However, no relationship was found between negative religious coping and past-year prescription stimulant misuse.[38]

Relationship and Experience Factors affecting Prescription Drug Misuse

Papp et al. looked at forty-nine young adult couples aged eighteen to twenty-five years in exclusive, dating romantic relationships in which one or both partners self-reported misuse of one or more medications.[39] The study's purpose was to predict young adults' risk for engaging in prescription drug misuse while examining individual, partner, and relationship factors. It evaluated past three-month use of sleeping, sedative or anxiolytic, stimulant, and/or pain medications for a reason other than intended; more frequent use or in a greater amount than prescribed; or use without a physician's order. Subjects were prompted by an alarm to self-report (yes/no) three times daily for ten days if they had misused since last reporting for the four drug classes.[39]

The study gathered demographics and evaluated for neuroticism, dysphoria, illicit drug use, alcohol use, and their possible correlation with relationship closeness. Male and female data was analyzed separately. Of the forty-nine couples enrolled, only one was gay and only one partner was randomly included in the gendered analyses. The average age in years of females was 20.76 and for males 22.09. Over 82% of respondents were enrolled in school (89.1% females, 82.6% males). The study had four analytic models to look at the effect of individual, partner, relationship, and their combination of factors on prescription drug misuse.[39]

The results showed that elevated dysphoria (OR 1.19, 95% CI 1.07-1.33, p<0.01) and alcohol problems (OR 1.22, 95% CI 1.12-1.32, p<0.01) predicted prescription drug misuse for females.[39] The full model including individual, partner, and relationship factors found cohabiting with a partner decreased females' odds of misuse (OR 0.06, p<0.01), but having a closer relationship as indicated by a higher averaged score (1-7) on the Unidimensional Relationship Closeness Scale increased drug misuse (OR 7.03, p<0.001). In a combined analysis, higher levels of dysphoria, alcohol problems, relationship closeness, and longer relationship duration indicated more misuse for females. However, school enrollment, cohabitation, and having a male partner who engaged in drug misuse were protective for females, indicating they were less likely to nonmedically use prescription medications.[39]

No single risk factor or protective factor was found for males' prescription misuse when individual, partner, and relationship factors were analyzed together. Separately, elevated dysphoria indicated less misuse while higher levels of illicit drug use demonstrated increased prescription misuse. Closer relationships also increased misuse.[39]

Konstenius et al. also looked at a relationship factor, except in their study it was a definitively negative one—childhood trauma exposure. They conducted a biphasic international study between 2009 and 2011 in seven countries examining childhood trauma exposure (CTE) in substance use disorder (SUD) patients with and without ADHD.[40] Participants were treatment-seeking SUD patients aged eighteen to sixty-five years. Most patients were male (73.4%), single/divorced (74%), not working (70.5%), and with an average age of forty years. Of these respondents, 21.3% reported childhood ADHD and 14.1% reported adult ADHD.[40]

Over half of participants (53.6%) reported at least one CTE.[40] The breakdown of different types of CTEs was: 13.2% sexual abuse, 28.6% physical abuse, 38.3% emotion abuse, 27.7%

violence in the family, and 22.4% emotional or physical neglect. CTE was associated with comorbid diagnosis of childhood ADHD (OR 2.61; 95% CI 1.94-3.51) and adult ADHD (OR 2.6; 95% CI 1.83-3.71). CTE was associated with ADHD ($p<0.001$). Sexual abuse, emotional abuse, and emotional neglect were significantly associated with ADHD (all p-values<0.05). Yet, physical abuse ($p=0.211$) or violence in the family ($p=0.084$) were not.[40]

There was no association between CTE and ADHD persistence from childhood to adulthood versus childhood ADHD without CTE.[40] No difference was found in ADHD symptom severity for adult ADHD patients with a SUD diagnosis and any specific type of CTE. Even so, adults without an ADHD diagnosis with CTE had significantly more severe ADHD symptoms.[40]

Sedatives and Anxiolytics

McCabe et al. used data from the 2015 Monitoring the Future (MTF) study to examine SUD symptoms in adulthood of persons who medically or nonmedically used prescription sedatives and/or anxiolytics in adolescence.[41] MTF began in 1975 and has three stages: Stage 1 is the selection of geographic areas; Stage 2 is the random school selection of 130 public and private high schools; and Stage 3 is student selection within each school. Each surveyed year has its data reported in Waves, with Wave 1 being a modal age of eighteen years and then having follow-up biennial surveys. In this study, the data analyses from age eighteen were used as controls. At age eighteen, participants were asked about medical (prescribed) and nonmedical (not prescribed) use of prescription sedatives/anxiolytics. At age thirty-five, substance use disorder (SUD) symptoms for alcohol (AUD), cannabis (CUD), and other drug use disorders (ODUD) were evaluated.[41]

At baseline (age eighteen), 12.5% of respondents had a lifetime nonmedical use of prescription sedatives or anxiolytics and 7.6% reported only using sedatives/anxiolytics

medically.[41] Past-year nonmedical use rates at thirty-five were 4.7% for sedatives and anxiolytics, 3.4% for opioids, and 1.5% for stimulants. Undifferentiated (medical or nonmedical) and nonmedical use of prescription sedatives/anxiolytics at age eighteen then demonstrated at age thirty-five increased AUD, CUD, and ODUD symptoms. Contrarily, using sedatives/anxiolytics only for medicinal use at age eighteen did not significantly increase AUD, CUD, or ODUD symptoms at age thirty-five.[41]

Another study by McCabe et al. had the primary study goals to estimate the development of nonmedical use of opioids, sedatives, stimulants, and tranquilizers for persons aged eighteen to twenty-six years and compare the results.[42] The study also used data from the Monitoring the Future National Survey up to 2014. It looked at high school seniors in 1977–2006 (Wave 1, modal age 18 years) and who were re-surveyed in the biennial Waves 2-5 (modal ages 19-20, 21-22, 22-23, 24-25). From this data there were 71,918 opioid respondents and 71,980 tranquilizer respondents. The demographics for these two groups were 52.3% female, 73.3% white, 12.1% black, 7.7% Hispanic, and 2.9% Asian. The survey assessed nonmedical use of prescription drugs by asking on how many occasions, if any, the subject had used a drug class without doctor's orders in the past year.[42]

For all four drug classes, the nonmedical use of prescription drugs was highest at Wave 1 and decreased to Wave 2 with differing rates of decline for each substance. The nonmedical use of prescription stimulants was found to have an accelerated rate of decline over time from age eighteen to twenty-six. At age eighteen, males used more opioids, but females used more sedatives, stimulants, and tranquilizers. Overall, males had faster rates of decline in use than females. Whites averaged more nonmedical prescription drug use than blacks or Hispanics, but

they all had similar rates of decline. Asians had similar stimulant use to whites at age eighteen but had a slower rate of decline of stimulant use versus whites.[42]

The study also included data about other non-medication substance use. Related findings included that binge drinking was associated with slower rates of nonmedical use of prescription drugs decline from age eighteen into adulthood. Cigarettes decreased the rate of decline for nonmedical use of prescription opioids, sedatives, and tranquilizers. Marijuana was correlated with a slower rate of decline in use, but only for sedatives and tranquilizers.[42]

Opioids, Heroin, and Other Analgesics

Martins et al. used data from the National Survey on Drug Use and Health from 2002–2014 of respondents who endorsed past-year nonmedical use of prescription opioids. They divided the respondents into three age groups: "adolescents" twelve to seventeen years old, "emerging adults" eighteen to twenty-five years old, and "young adults" twenty-six to thirty-four years old. The study examined prescription opioid use disorder and heroin use. The majority of respondents were white (70.8%). They found that the past-year prevalence of nonmedical use of prescription opioids decreased in all three groups, but heroin use and OUD increased from 2002 to 2014 in emerging adults. The yearly prevalence of nonmedical prescription opioid use decreased 34% in emerging adults in 2014 versus 2002 (aOR 0.63, CI 0.56-0.71).[43]

Votaw et al. also used data from the National Survey on Drug Use and Health from 2002–2013 of respondents who endorsed past-year nonmedical use of prescription opioids to study the perceived risk of heroin.[44] There was not a significant effect of prescription OUD on perceived risk of trying heroin. However, using heroin was associated with not reporting great risk of trying heroin once or twice or regularly.[44]

Jones looked at the paradox of decreasing nonmedical opioid analgesic use and its increasing abuse or dependence in the United States from 2003-2014.[45] The study, conducted by Substance Abuse and Mental Health Services Administration (SAMHSA), focused on opioid use and used self-reported data from the National Survey on Drug Use and Health from 2003–2014. Participants were civilian, noninstitutionalized persons twelve years and older. The average past-year nonmedical opioid use rate was lowest in the 2012–2014 data at 43.3 per 1,000 persons twelve years of age and older. Rates of past-year opioid abuse or dependence were highest in the 2012–2014 data at 7.5 per 1,000 persons versus 6 per 1,000 persons at the beginning of the study. The rate of abuse or dependence was stable during the study period ranging from 14 to 17.3 per 1,000 persons, peaking in 2009–2011. Adjusted odds ratios were higher for opioid abuse/dependence in participants eighteen to twenty-five years old, twenty-six to thirty-four years old, non-Hispanic whites, household incomes less than $50,000, persons who were uninsured on Medicaid, and persons with substance abuse or dependence of alcohol, marijuana, cocaine, heroin, prescription sedatives, tranquilizers, or stimulants. Among people with past-year opioid abuse or dependence, the highest odds of abuse/dependence were in those who used prescription sedatives/tranquilizers, heroin use/dependence, and prescription stimulant abuse/dependence.[45]

Cicero, Ellis, and Kasper conducted a retrospective study without predictive modeling to analyze how patients in opioid abuse treatment programs voluntarily were first exposed to opioids.[46] It used data from the Survey of Key Informants' Patients Program from 2010–2015 totaling 9,540 respondents. The authors found that 47.1% of participants indicated their first exposures were through prescriptions for pain. Prior to or concurrently with their first opioid use 94.6% of respondents had used psychoactive substances. These substances included alcohol,

nicotine, marijuana, Ritalin/Adderall, amphetamines, methamphetamines, benzodiazepines, crack/cocaine, ecstasy, and hallucinogens. Excluding alcohol, nicotine, and marijuana 70.1% of patients still reported using a psychoactive substance prior to or at the same time as their first opioid prescription.[46]

Kenne et al. looked at undergraduate and graduate students at a public Midwestern university in spring of 2013 to determine the prevalence of prescription opioid misuse, the perceived harmfulness of prescription opioids, the reasons for misuse, and why medical and/or mental health treatment was not sought when using prescription opioids for those reasons.[47] It also looked at the age of first misuse, reason for first misuse, and use in the past year. The mean age was 24.1 years for undergraduates and 31.8 years for graduate students, for an overall mean age of 26.4 years.[47]

Regular misuse of prescription opioids was viewed as dangerous by respondents with scores ranging from 5.61 to 5.80 on a 6-point scale.[47] Amongst opioids including Vicodin, OxyContin, Diluadid, Demerol, Talwin, Ultram/Ultracet, Percocet, Darvocet, Methadone, Buprenorphine/Suboxone, and Morphine, Vicodin was viewed as the least dangerous and morphine as the most dangerous. Lifetime use of non-prescribed opioids was 9.5%, with 3.7% of respondents indicating use within the past year. The average age of first misuse varied by drug, with the youngest age of misuse at 18.0 years for morphine (SD 3.65) and the oldest at 24.0 years (SD 2.83) for Ultram/Ultracet. 8.1% of respondents indicated using opioids for physical pain and 2.2% for emotional pain. Of those who reported taking opioids for physical pain, 42.6% indicated they used opioids without a prescription because they believed the pain "was temporary pain that would go away" and 38.9% "needed immediate relief (couldn't wait for

doctor/hospital)." Regarding opioid use for emotional pain, 53.3% "did not want others to find out" and 46.7% were "too embarrassed" to seek medical attention.[47]

Cutler and Kremer also focused on the use of pain medications, however they conducted in-depth semi-structured interviews to explore college students' justifications for the nonmedical use of prescription painkillers.[48] The primary drug class of focus was opiates throughout the interviews, but central nervous system depressants and stimulants were also addressed. The study participants' demographics did not match the university's overall demographics. The participants identified as 99.3% white, 60.5% male, 7.9% athletes, 40.8% affiliated with Greek life, 42.12% seniors, and had a mean age of twenty-one years.[48]

The interviews found that students were aware of the risks of misusing a prescription painkiller, but that they used safety justifications such as comparing themselves to others or comparing their use to a legitimate (prescribed) use.[48] Students admitted that the drugs they were using were safe when used legitimately. Many students would claim being "responsible users" by comparing themselves to others, stating about "knowing their limits," and explaining that their actions were not affecting anyone besides themselves. The interviews produced a hierarchy of opiates, with Percocet and Vicodin viewed as safer than Oxycontin or heroin. Another theme that emerged was that students were using opiates to relax or get drunk quicker without the typical alcoholic hangover symptoms. The students indicated that using prescription drugs felt safer and more predicable than "street" drugs because they are pure, not mixed/laced with anything, are prescribed by doctors, and are approved by the FDA. The interviews also revealed that students felt it was easy for them to get a prescription for pain pills.[48]

The students also discussed how, unlike with other types of drugs or alcohol, their parents did not specifically discuss not using prescription medications that were not written for them.[48]

The students discussed how their parents' actions or inactions made them believe it was okay to use prescription drugs. For example, some parents gave their children "leftover" prescription medications that they had saved. Other students stated their parents enabled them to misuse prescription medications by not addressing missing pills or by keeping the pills in easily accessible locations, which made them feel that their parents condoned the action.[48]

The authors concluded that none of the students claimed "everyone" was using opioids (unlike with stimulants), that the students were generally aware of the risks of taking prescription medications not prescribed to them and that they viewed some pain medications as stronger than others, a theme which was not seen with stimulants.[48] No students denied having any responsibility for their actions, which the authors concluded meant that the students knew what they were doing was wrong. Since the interviews were conducted in late 2010 and early 2011, prescribing laws and practices have changed for controlled substances and quantities. For example, although the study did not take place in Indiana, as of July 1, 2017 in Indiana a first-time prescription for an opioid or a new prescriber for a previously prescribed substance is limited to seven-day supply and may not exceed seven days if the recipient is less than eighteen years of age without explicit reasoning from the prescriber. This law also includes non-opioids such as tramadol. Nevertheless, the attitudes and opinions the students expressed are no less valid.[48]

Parks et al. conducted eight semi-structured focus group discussions at one large research-focused, state university in the Northeastern United States in 2013.[49] The mean age was twenty years old (SD 1.6) for the participants, 64% were male, 80% Caucasian, 49% underclassmen, and 46% lived on campus.[49]

The study had thematic analyses of the discussions to determine student perceptions of most common prescription drug classes for nonmedical use, the motives for use of different drug classes, and the negative consequences of using.[49] Sixteen students (27.6%) reported only using one class of drugs. The primary source for drugs was friends or peers, but five of the eight groups indicated that it would be easy to get a prescription from the campus health center or physician. The cost of obtaining a stimulant varied with the time in the semester, with prices more expensive at midterms and finals. The cost of benzodiazepines and opioids varied by drug and strength and were regarded as not as easy to get on campus or by other means.[49]

Participants reported using benzodiazepines, stimulants, and opioids to get high and/or enhance an alcoholic effect.[49] Adderall and Vyvanse were the most popular and used for studying, getting work done, staying awake, increasing focus and attention, and improving grades or test scores. Benzodiazepines were used for relaxing, loosening up—purely recreational purposes. They also were used with alcohol for a "guaranteed blackout" and when coming off of other drugs. Opioids were used recreationally for their "warm and cozy" feeling, but students indicated they may have originally been used for pain.[49] Notably, each group of students mentioned the possibility of addiction and many were especially wary of opioid use, for this reason.[49]

College Life Study Prescription Drug Misuse Trends

Allen et al.'s study used data from the College Life Study to examine students' opportunities to use drugs and their use if given the opportunity.[50] This study excluded Year 1 data, including only Years 2–8 (school-years 2005/2006 through 2011/2012). Throughout Years 2–8 participants were annually asked questions about past-year marijuana, inhalant, hallucinogen, cocaine,

heroin, and ecstasy use; Years 3-8 also asked about participants' amphetamine and methamphetamine use. All answers were self-reported.[50]

The participants reported the greatest overall exposure to marijuana, but that exposure to it declined with passing years.[50] All other drugs followed a decline pattern as well, indicating the highest opportunity in Years 2–3, except for cocaine, which had its highest prevalence in Year 4. For the incidence of opportunities to use drugs in Years 2–5, marijuana was reported to have the most opportunity, followed by prescription drugs, and then other drugs.[50]

During Years 6–8, the amount of opportunity participants had to use non-prescription drugs surpassed the opportunity to use prescription drugs without a prescription, however, marijuana remained the highest.[50] There were fairly stable opportunities to use drugs up through Year 4, but the chance to use prescription medications declined in Year 3. The rate of use if given opportunity stayed fairly stable for drug and prescription medications throughout the study; though the use if given opportunity for marijuana decreased with time.[50]

The cumulative "use given opportunity" data from the study period showed that if provided an opportunity, 80.7% of participants used marijuana, 55.6% participated in nonmedical use of prescription stimulants, 43.5% used hallucinogens, 44.5% used cocaine, 52.5% used prescription analgesics nonmedically, 34.5% used ecstasy, 57.7% used prescription tranquilizers nonmedically, and 18.6% used heroin.[50] Marijuana, prescription medications, and other drugs had linear declines in opportunity for use over time. Marijuana had the only linear decline in use given opportunity.[50]

Morioka's study used the College Life Study data at Years 1 (school-year 2004-2005) and Year 3 (2006-2007) to examine affective dysregulation, when a person struggles to judge unpleasant emotional or stressful situations, and its relationship to prescription analgesic use

among college students.[51] Nonmedical prescription analgesic use peaked in Year 3 of the study. The study had many parts to its survey including: an affective-subscale from Dysregulation Inventory (DI-A) to measure affective dysregulation, the College Early Conduct Problems Index (CECPI) to evaluate for conduct disorder, the Beck Depression Inventory (BDI) and Center for Epidemiologic Studies Depression scale (CES-D) to assess for depression, and the General Health Questionnaire (GHQ-12) to measure psychological distress.[51]

It specifically examined nonmedical prescription analgesic use with or without other drugs, other drug use without nonmedical prescription analgesic use, and non-users.[51] The study population was 53.8% female and 70.7% identified as non-Hispanic white. At Year 3, 9.4% (87) reported nonprescription analgesic use while 50.6% (470) used drugs, but not analgesics (stimulants, tranquilizers, and seven illicit drugs: marijuana, inhalants, hallucinogens, cocaine, heroin, amphetamine/methamphetamine, and ecstasy), and 40% (372) were nonusers. The study demographics varied significantly between the three groups, except for parental education and GHQ (psychological distress score).[51]

The likelihood of starting nonmedical prescription analgesic use versus abstaining from was higher for males.[51] Affective dysregulation, conduct problems, depressive symptoms, and psychological distress all were significantly associated with nonmedical prescription analgesic use when compared to no drug use. All but conduct problems were also significantly associated with nonmedical prescription analgesic use when compared to non-analgesic drug use. The DI-A and CECPI were the only significant predictors of nonmedical prescription analgesic use. Depression and affective dysregulation seem linked to nonmedical prescription analgesic use.[51]

Over-the-Counter Medications

Le et al. explored the nonmedical use of over-the-counter (OTC) medications by collegiate students, specifically to assess the relationship between nonmedical use of OTC medications and the nonmedical use of prescription drugs.[52] This study defined nonmedical use as "taking a drug for a purpose not intended by the manufacturer, taking a drug at a higher dose than recommended, or taking a drug by a non-recommended route of administration." It was not designed to be able to distinguish between simultaneous or serial nonmedical use of OTC medications and prescription drugs.[52]

The respondents' demographics were: 59.8% female, 75.2% Caucasian, and 12.5% Asian, and 4.2% African American.[52] Undergraduates were 69.3% of the sample and 8% belonged to a social Greek organization. The study population was more likely to be female, non-affiliated, graduate students which the authors state was possibly biased towards a null hypothesis. The respondents' ages were 23.7% between eighteen to nineteen years, 29.3% were twenty to twenty-one years, and 46.1% were twenty-two or more years of age; 30.5% of the responses were from graduate students.[52]

The general results of the study population showed the incidence of nonmedical use of prescription drugs at 21.4%, and nonmedical use of OTC medications at 11.2%.[52] Students who nonmedically used OTC medications were more likely to nonmedically use prescription drugs and have poly-prescription drug misuse (aOR 3.82, 95% CI 2.01-7.26, $p<0.001$). Specifically, the nonmedical use of OTC cough medications yielded an aOR of 3.06 (95% CI 1.85-5.07, $p<0.001$) for the misuse of prescription drugs. OTC stimulants and sleep aids also had a similar trend.[52]

Studies using the National American College Health Association-National College Health Assessment Data

Alamir et al.'s study purpose was to examine associations between nonmedical use of prescription drugs of four drug classes (antidepressants, painkillers, stimulants, and sedatives) in the past twelve months and five aspects of sleep quality (getting enough sleep, early awakening, daytime sleepiness, difficulty falling asleep, and problems associated with daytime sleepiness) in the past seven days.[53] Data was gathered from the fall 2010 and the spring 2011 National American College Health Association-National College Health Assessment. The majority of participants were female (65.3%) and white (68.1%). The mean age was 22 years and 4.4% had a medical diagnosis for ADHD, 18% for depression, 3.7% for insomnia, and 2% had other sleep disorders. In the past twelve months 3% of participants had used antidepressants, 7.5% had used painkillers, 4.1% had used stimulants, and 7.4% had used sedatives without a prescription.[53]

Painkillers were not significantly associated with greater odds of daytime sleepiness, but were associated with not getting enough sleep, early awakening, daytime sleepiness, and difficulty falling asleep. Antidepressants were not associated with any sleep behaviors. Sedatives were not significant for any sleep behaviors in males; contrastingly, females were significantly impacted by early awakening and difficulty falling asleep ($p<0.001$). The non-gender specific report found that sedatives were linked to problems with daytime sleepiness ($p<0.01$); however, that was not found in either the male or female only subsets.[53]

Stimulants did not significantly correlate with an increase or decrease in daytime sleepiness.[53] Additionally, for females, stimulants did not significantly correlate with getting enough sleep, early awakening, or difficulty falling asleep. For each of these categories, males and the male/female combination were statistically significant. Having more daytime sleepiness was significantly related to stimulant use in all groups. Males also had poorer sleep, early awakening, daytime sleepiness, and difficulty falling asleep. The use of at least one drug

category was statistically significant for issues with all sleep categories, except daytime sleepiness.[53]

Ford et al. used the same study as Alamir et al. to obtain data to examine an entirely different topic: the nonmedical use of opioids by athletes. Historically, there are mixed results from studies examining athletes and their nonmedical use of prescription opioids, tranquilizers, etc. Ford et al.'s study looked at this issue from the perspective of a "sport ethic."[54] Succinctly, sport ethic is a mindset for "real" athletes and is a set of four ideas: dedication to the sport, striving for distinction (wins), accepting risk and not fearing injury, and believing that no obstacles can stop a "real" athlete. This view creates "moral imperatives" that the authors state can be used as justification or rationalization of deviant behaviors in those who believe they are "real athletes." Their study used data from 2008-2011 American College Health Association-National College Health Assessment (ACHA-NCHA II), including 391 colleges with 320,412 respondents to look at sport involvement, injury history, and the nonmedical use of prescription opioids in the past twelve months among college students. It separated responses from varsity athletes from non-athletes, including club and intramural athletes. Respondents indicated that 8.3% had nonmedically used prescription opioids in the past twelve months, 8% were varsity athletes, 17.4% had been injured in the past year, 54.6% identified as female, 53.3% were age eighteen to twenty years, and 31.1% age twenty-one to twenty-three years. Injured, male athletes reported a 17.9% nonmedical prescription opioid misuse rate, while generally male athletes reported 11.5% use, and injured athletes regardless of gender reported 13.5%.[54]

Varsity athletes' were more likely to nonmedically use prescription opioids versus non-athletes.[54] Participants who were injured were more likely to participate in nonmedical use of prescription opioids in the past year was 1.871 (95% CI 1.806-1.939, $p<0.001$). The study also

found that injured male athletes were most likely to participate in nonmedical use of prescription opioids versus female athletes, non-athletes of either sex, or non-injured persons (athletes or not, of either sex).[54]

Academic Policies and Prescription Drug Misuse

Aikins, Zhang, and McCabe reported a recent widespread initiation of honor codes, academic integrity codes, sanctions, and policies amongst higher learning.[55] Their study examined a stratified random sample of 200 United States colleges and universities websites. Specifically, the study included one "flagship" or other large public university per state, and randomly stratified 150 other four-year institutions with enrollments above 1,000 students. The researchers conducted "text searches" from July to August 2014 on the universities' websites, examining student handbooks, code of conducts, and other documents about student integrity. They searched for words such as "cheating" and "plagiarism" to obtain materials. Within documents, they searched terms such as "nonmedical" and "prescription stimulants/medications" and related terms such as "enhancement," "academic performance," and "Adderall" in internal website search bars and general internet search bars. The study excluded references to legitimate medical use as prescribed by doctor.[55]

Of the 200 higher learning institutions, only nine institutions did not have academic integrity policy that could be found.[55] Duke University was the only university to explicitly prohibit nonmedical use of prescription stimulants and cognitive enhancement drugs and define their use as an academic conduct violation. General alcohol and other drug prohibitions were found in all but two schools' websites, typically in a blanket statement about conforming to federal and state laws. The study only looked at 200 of over 7,600 institutes of higher learning.

Summary

A number of studies have looked at the nonmedical use (misuse) of prescription stimulants. The criteria for nonmedical use and misuse varied amongst the studies, but the consistent actions included taking a medication without a prescription, taking it more frequently than prescribed, or taking a different dose (often indicated as higher) than prescribed. Ross, Watkins, and Arria each researched the motivations and beliefs surrounding the nonmedical stimulant use by collegiate students and found mostly academic motivations. A second study by Arria looked specifically at the effect of nonmedically using stimulants on grade-point averages, finding no significant difference overall or between patterns of use. Donaldson, Munro, Wilens, and Benson each looked at the psychological aspects of stimulant misuse. Misusers tended to have more executive dysfunction and believe using stimulants was in their best interest. However, only ADHD symptoms—not those of depression—correlated with misuse. Geisner found misuse was linked to increased gambling, while Gallucci connected religiosity with decreased misuse.

Papp et al. examined general prescription substance misuse in the context of dating relationships, revealing that romantic relationships affect female misuse in numerous ways, but not males. McCabe found the rates of decline in use for different drugs varied and the misuse of sedatives/anxiolytics at eighteen indicated more substance misuse symptoms at age thirty-five. Martins, Votaw, and Jones looked at heroin and/or opioid use, indicating an increase in nonmedical opioid use with concurrent use of other drugs and decreased perception of riskiness of using heroin if someone had used it before. Ford determined injured, male athletes are the most at risk to misuse opioids. Allen and Alamir each discussed multiple drug classes in their studies finding if presented the opportunity students will often use substances and that they disturb sleep quality. The interviews conducted by Parks et al. and Cutler and Kremer

determined the themes that students are warier with opioid use, that parents did not address misusing medications, and drugs are perceived to be easy to get. Aikins took an entirely different approach to collegiate substance misuse and looked at institutional policies regarding academic dishonesty, finding only one with a medication specific academic policy. Meanwhile, Le found over-the-counter drug misuse increases the likelihood of prescription drug misuse significantly. See Table 1 through Table 9 for comparisons.

The Indiana College Substance Use Survey

Background

The Indiana Collegiate Action Network (ICAN) has conducted the Indiana College Substance Use Survey (ICSUS) annually since 2009. All Indiana colleges are invited to participate annually in the electronic survey, but the participating institutions vary year to year. There is not a designated randomization technique for this survey; it relies on convenience sampling.[56–62] The participating institutions determine student selection (random sampling, entire population, undergraduates only, etc.) and if incentives will be offered. The institutions also determine during which two weeks either before spring break or at least one month afterwards it will be conducted on their campus.[56–62]

Each campus that participates receives an individualized report of their students' responses that is not publicly released.[10] Each institution may customize their survey with up to ten questions for their students that will not be included in the statewide report. The statewide reports include the most recent data from the Monitoring the Future Study for a comparison of Indiana to national rates while the institution-specific reports include that year's statewide data for comparison to a specific institution. Butler University has participated in the ICSUS since 2009 and now participates every other year on even numbered years.

There have been numerous changes to the survey throughout the years. In 2016, the survey changed substantially. Instead of asking about specific prescription medications (Adderall, Vicodin, Xanax, etc.) it began to ask generally about the categories of stimulants, painkillers, and sedatives.[60] Prior to 2016, the ICSUS had also asked about prescription medication use without a prescription, misuse of a prescribed medicine to get high, and over-the-counter (OTC) medicine misuse. The age of first use of a substance was changed from being reported as an age in years to

the dichotomous option of before or after starting college.[60] The following year, the study began limiting participant responses to only those who were eighteen to twenty-five years of age.[61]

The ICSUS study design allows the removal of responses if they meet any prespecified criteria. The survey also changed some of the data reporting in 2016; previously, missing data were included in prevalence rates' cumulative totals, now only valid responses are used, which the authors suggest may lead to slightly higher findings.

Statewide Response rates

The survey response rates and the number of institutions that participated in the ICSUS fluctuate. The average number of participants invited is now 56,480, as the number of invited schools and participants has increased over time. The average response rate is 12.5% correcting for the outlier school from 2014 with an exceedingly low response rate of 0.3%. The average usability of surveys is 93.7% when only age appropriate responses are included. For a more complete description of the 2012-2018 Indiana ICSUS survey data See Table 10.

2012–2018 STATE OF INDIANA ICSUS SURVEYS

Indiana 2012–2015 Data

From 2012–2015 an average of 11.6% of Indiana respondents indicated they had used a prescription that was not prescribed to them in the past year, decreasing each year from 12.8% in 2012 to 9.8% in 2015.[56–59] Similarly, respondents' own prescription medication misuse in order to get high decreased from 3.5% in 2012 to 2.6% in 2015 and OTC misuse in order to get high decreased from 2.1% in 2012 to 1.8% in 2015. For all years, males were significantly more likely to misuse their own prescriptions. This trend was also seen in males from 2012–2014 for OTC drugs and non-prescribed prescriptions. 2013 was the only year that found a significant

difference between those over/under twenty-one years of age for past-year OTC misuse, with those under twenty-one more likely to misuse. For more information see Tables 11, 12, and 13.

For past-month use, respondents indicated that an average of 4.5% had used a prescription not prescribed to them, 1.1% had misused their own prescription, and 0.45% had misused an OTC medication.[56–59] Each rate decreased from 2012 to 2015.[56–59] All years except 2015 found significant past-month prescription use differences between males and females. See Tables14 and 15.

Looking at specific medications, Adderall was consistently the most commonly misused medication within the past six months, but its use decreased over time (10.5%, 10.1%, 9.1%, 7.2%).[56–59] The next most common was either Xanax of Vicodin depending on the year, but both had downwards trends in use as well (3.8%, 3.5%, 2.9%, 2% and 3.6%, 3.6%, 2.7%, 2.7%). Codeine repeatedly was the fourth most common drug used (2.8%, 2.7%, 2.2%, 1.9%). Ritalin was fifth in 2012, 2014, and 2015 (1.6%, 1.7%, 1.5%) with Lortab (1.3%) being fifth in 2014 and Ritalin, sixth (1.2%). In 2012 and 2013 males were significantly more likely to misuse than females for Adderall, Ritalin, Codeine, Xanax, and Vicodin (p-values<0.001). In 2014, this trend continued, except for Xanax (p-values<0.05).[56–59]

From 2012–2015 respondents believed that about 24% of other students would strongly disagree with them using amphetamines one or two times.[56–59] The corresponding "strongly approve" rate decreased over time from 10.3% in 2012 to 7.7% in 2015. Even so, about 27% of respondents believed other students would neither approve or disapprove of using amphetamines once or twice. Though, when asked about how other students would feel about the regular use of amphetamines without a prescription, the strongly disapprove rate increased from 38.5% in 2012

to 42.5% in 2015, while the strongly approve rate remained approximately at 3.5%.[56–59] For more details see Figure 1 and Figure 2.

The study also looked at the age of first misuse. During this time, the survey still included non-responses as part of the cumulative percentage results. The average age that students began to use prescriptions not prescribed to them was 17.75 years, but 85.55% of respondents did not misuse. Of those who misused their own prescription, the average age of first misuse was 17.675 years, but 94.275% of those surveyed did not misuse. The age of first misuse of OTC medication was slightly younger at 16.65 years, with 96.275% not misusing these medications. For more information see Table 16.

Indiana 2016–2018 data

In the statewide 2016 ICSUS, respondents who had used nonprescribed prescription medications indicated that 56.9% began using stimulants, 35.6% began using painkillers, and 49% began using sedatives after starting college.[60] Rates were slightly lower in 2017 at 54.7%, 30.9%, and 42.4% respectively.[61] In 2018, the percentage of students who initiated substance use after starting college was 54.8% for prescription stimulants, 33.3% for painkillers, and 49.5% for sedatives.[62] Males began to use stimulant, painkiller, or sedatives after starting college in 2016 significantly more than females ($p<0.05$) as well as in 2017, excluding painkillers. The 2018 report did not provide statistical analyses between males and females. Table 17 and Table 18 provide more detail.

From 2016–2018 an average of 87% of students had never used prescription stimulants without a prescription. Another 8% of students who reported they had used stimulants in the past, had not done so within the past month of taking the survey either. Roughly 2.4% of the

remaining respondents had used stimulants one to two times in the past month. For non-prescriptive use of prescription painkillers from 2016–2018, the number of respondents who indicated they had never used increased yearly, averaging 91.6%. As the number of never-used respondents grew, the number of students who had used in their lifetime but not in the past month dropped accordingly (7%, 6.7%, 5.2%). This left an average of 0.9% of respondents who had used prescription painkillers one to two times in the past month. See Table 19 for specifics.

The non-prescriptive use of sedatives in the past month also mirrored the trend seen in prescription painkillers with increasing rates of never-misused from 2016 to 2018 (92.1%, 92.8%, 93.2%) and a corresponding decreased rate of lifetime, but not recent use (5.5%, 5.3%, 4.8%).[60–62] The rate for using sedatives one to two times in the past month was similar averaging 1.1%. The perception of how close friends would feel about the respondent using a prescription medication not prescribed to them showed that 62.7% believed their friends would strongly disapprove, over 18.8% somewhat disapprove, and only 1.3% would strongly approve. Figure 3 looks more closely at the perceptions of prescription misuse.

2012-2018 BUTLER UNIVERSITY ICSUS SURVEYS

Changes in the ICSUS survey questions and biennial participation make it difficult to directly compare the data from prior to 2016 to those afterwards. The Butler-specific questions within the survey from 2012 and 2014 primarily focused on alcohol and some Student Government Association services and were not examined here. See Table 20 for Butler's ICSUS participation by year. The response rates ranged from 24.6% to 39%, with survey usability ranging from 92.5% to 99.6%.

From 2012 to 2014 the percentage of Butler students who used prescription medications not prescribed to them in the past year increased from 7.1% to 10.6% as the state of Indiana's

decreased from 12.8% to 11.2%.[63,64] Each year Butler males were significantly more likely to misuse than Butler females ($p<0.05$). The percentage of students who used prescription medications not prescribed to them in the past month also increased from 2012 to 2014, from 1.8% to 3.3%, but was still lower than the general Indiana rates which decreased from 5.3% to 3.8%. Butler males remained significantly more likely to misuse ($p<0.05$) than females. In 2014, students twenty-one and older were significantly more likely to abuse than those below twenty-one years of age (5% vs. 2.7%, $p<0.05$). 2012 and 2014's surveys also looked at the rates that eleven specific prescription drugs were being misused. Each year Adderall was the most common (5.9%, 8.3%), followed by Ritalin (2.4%, 1.8%), then Vicodin (3%, 2.3%). It also examined the percentage of Butler students who combined alcohol and stimulants, which rose from 3.2% in 2012 to 4.7% in 2014.[63,64] Tables 21, 22, 23 have more details.

The age of first-time use for prescription medications not prescribed to a student was 17.9 years in 2012 (Indiana average 17.8) and 18.2 (Indiana average 17.8) in 2014.[63,64] The perceived opinions of other students about the respondent trying amphetamines (e.g., Adderall, Ritalin) once or twice indicated that 4.1% believed they would face strong approval, 24.7% some approval, 29.4% neither approval or disapproval, 17% some disapproval, and 24.3% strong disapproval in 2012. In 2014, the strongly approve perception increased to 8.3%, the somewhat approve vote increased to 26%, 27.8% neither approved nor disapproved, somewhat disapprove responses increased to 21%, while there was a larger decrease to 16.7% for strong disapprovals. The perceived opinions of other students on the respondent trying amphetamines regularly in 2012 had more distinct results: 44.6% strongly disapproved, 35.8% somewhat disapproved, and only 18.3% neither approved nor disapproved, 8.7% somewhat approved, and 2% strongly approved. In 2014, only 1.8% strongly approved, 9.6% somewhat approved, 20.7% neither

approved or disapproved, 27.8% somewhat disapproved, and 39.1% strongly disapproved of students regularly taking amphetamines.[13] Figures 4 and 5 more closely depict these opinions.

In the 2012 Butler ICSUS report 92.3% of students reported never using prescription pills that were not prescribed for them, with 5.5% using one to five times, and 1.6% using six or more times.[63] Only 2.4% of students reported using medications prescribed to them to get high and 1.2% using OTC medications to get high. Similar values were seen in 2014. In 2014, 89.1% of students reported never using prescription pills not prescribed to them with corresponding increases in use one to five times to 6.8%, six or more times rising to 3.9% versus 2012.[63,64]

Looking at past-month use in 2012, 92.9% of students had not used prescription pills that were not prescribed to them with 1.4% uses one to five times.[63] Only 0.8% reported using their own medication to get high within the past month. A similar value was seen in 2014 (0.5%).[64] The age of first-time use for prescription pills not prescribed to respondents in 2014 showed that 2.5% began at sixteen to seventeen years old and 6.6% began at eighteen to twenty years old, with 89.6% of respondents never having used. Similar rates were found for each age group in both OTC and prescriptions. In 2012, 91.1% of respondents had never used prescription pills that were not prescribed to them, but 2.4% began at age sixteen to seventeen years and 3.9% began at age eighteen to twenty. For 2014, 93.7% of participants had never used prescription pills not prescribed to them. Yet there was also an increase to 3% for use of one to five times in the past month.[64] Table 24 has additional past-month data.

The survey examined commonly misused prescription medications and found in 2012 3.6% of Butler University respondents had used Adderall once in the past six months without a prescription, with 5.9% of respondents overall reporting use.[63] From a list of medications including Adderall, Ritalin, Xanax, codeine, Vicodin, Lortab, Percocet, OxyContin, morphine,

methadone, and steroids, Adderall was the most commonly used medication. However, the Indiana rate was significantly higher at 10.5% ($p<0.01$). Vicodin was the second most common medication used at 3.0% at Butler (3.6% Indiana). Ritalin was the third most common at 2.4% at Butler University with a higher rate of use than the statewide data (1.6%) and with 2.2% of Butler students only using Ritalin once in the past six months. The fourth most common drug used was Xanax with 2.2% overall using (3.8% in Indiana) and 1.2% using only once. The sixth most common drug at Butler University in 2012 was Percocet (1.6%), which was also more common than the state reported use (1.2%). Males were significantly more likely to misuse than females for Ritalin, Codeine, Lortab, and morphine in 2012 ($p<0.05$).[63]

In 2014, the past six-month singular use of Adderall decreased to 2.8%, while the overall use increased to 8.3% (Indiana 9.1%).[64] It, again, was the most commonly reported drug. Vicodin remained the second most common drug at 2.3% (2.7% Indiana), with 1.3% of Butler students reporting a singular use within the past six months. Ritalin again was third with 1.8% use, again surpassing the Indiana reported use of 1.2%. Males were significantly more likely to misuse than females for Adderall, Ritalin, and codeine in 2014 ($p<0.01$).[64]

The 2016 ICSUS survey measured slightly different data regarding drug misuse and did not include statistical analyses. The ICSUS biannual survey indicates that on Butler University's campus in 2016 the participating students use less prescription painkillers (0.8%) and sedatives (1.9%) that were not prescribed to them than the Indiana averages (2.3% and 2.2%).[11] The rate of prescription stimulant use was equal at 5.2%. However, Butler students who had used prescription stimulants, painkillers, and sedatives without a prescription of their own indicated that they began to use more frequently than the Indiana state average (68.3% vs. 56.9%, 45.5% vs. 35.6%, 68.4% vs. 49.0%). The perceived disapproval of fellow students for using prescription

medications not prescribed to them was similar to the Indiana state rates (85.9% vs. 82.0%). Notably, 90% of Butler females believed that their close friends would disapprove, while males only believed 76.8% would disapprove. Students under twenty-one believed that their friends would disapprove more than those over twenty-one years of age (87.8% vs. 82%). More specifically, 61.4% of respondents indicated that they believed their close friends would strongly disapprove of them using prescription medications not prescribed to them, with 18.9% somewhat disapproving, and only 1.9% believing that their close friends would show any approval.[11]

In the 2016 Butler University ICSUS data, past-month prescription stimulant misuse frequency showed: 87.9% had never used, 6.9% had used but not in the past month, 2.5% used one to two occasions, 1.1% used three to five occasions, and 1.7% used on six or more occasions.[11] For prescription painkillers, the results showed that 93.4% had never used, 5.8% had used but not in the past month, and 0.9% used at least once in the past month. For prescription sedatives, the results were 94.2% had never used, 3.8% had used but not in the past month, and 1.9% used at least once in the past month. The majority of students (68.3%) started misusing prescription stimulants after starting college while 31.7% indicated beginning before college. For prescription painkillers, 54.5% indicated starting their misuse before college and the remaining 45.5% began after starting college. For prescription sedatives, 31.6% indicated they began before college and 68.4% indicated they began after starting college.[11] Tables 25, Table 26, and Figure 6 share this data more fully.

One of the Butler-specific questions from 2016 did relate to drug use. It used an open-ended format to ask, “If you consider yourself someone in recovery from drugs or alcohol, what services would you like offered at Butler for recovery?” Response themes included having a twenty-four-hour mentor/crisis program, anonymous help lines, AA-like meetings and

mentorship, counseling/support groups, mandatory on-campus rehab, and having an accountability system. Other response themes focused on having academic help such as a decreased course-load during recovery, assistance on how to communicate with professors and organizations about recovery commitments, curriculum changes focusing on resources, and education on wise drinking strategies.[11]

The 2018 Butler University ICSUS found that Butler had higher rates than Indiana for nonprescriptive use of prescription stimulants and prescription painkillers.[65] Still, it had lower rates of use for prescription sedatives. Since the 2016 Butler survey, there was an increase in the use of stimulants, painkillers, and sedatives.

Looking at how students thought their close friends would react to their use of select substances, 83.5% of Butler students thought that their friends would disapprove of using a prescription medication not prescribed to them.[65] The Indiana disapproval rate was similar at 81.9%. Notably, at Butler 61.7% indicated that their friends would strongly disapprove. Breakdowns by gender and age over/under twenty-one years did not vary much (83.3%-83.8%) for Butler students.[65]

In 2018, 86.1% of respondents had never used prescription stimulants not prescribed to them. Another 7.3% had used stimulants before, but not within the past month, while 4.1% had used one to two times within the past month, and 1.2% three to five times. The age when students began to use prescription stimulants not prescribed to them was more evenly divided with 47.1% starting prior to college and 52.9% beginning after.[65]

Respondents indicated that 94.7% of them had never used prescription painkillers not prescribed to them, and 3.3% had used but not within the past month. Slightly more distinct than stimulants, the division of when students began to use prescription painkillers not prescribed

indicated 53.8% started prior to college and the remaining 46.2% afterwards. The majority of students (63.6%) began to use prescription sedatives not prescribed to them after starting college. Nonetheless, 95.5% of respondents had never used prescription sedatives not prescribed to them, but 2.9% had used but not within the past month.

The 2018 survey had multiple new questions regarding drug use.[65] One of the Butler-specific questions asked, "If you have been prescribed medication during your time as a Butler student, what is your primary strategy for safeguarding medication?" The results showed that 1.8% of students kept their medications in a lock box, 4% chose not to bring unnecessary medication to campus, 27.4% refused to share their medication, 0.4% used safe disposal. However, 19.5% stated they did not use any of the strategies and 44.2% did not take prescriptions. Another question asked if students had "ever been in a position where they thought Narcan (opioid overdose reversal drug) might be helpful?" which found only 1.3% answered yes.[65]

The 2018 survey also asked participants to indicate the primary reasons they might hesitate to call for medical help for a person who they believed may be experiencing an overdose from alcohol or drugs.[65] Over half of the respondents (55.1%) indicated that if they were aware of someone experiencing an overdose, they would not hesitate to call for medical help. Of those who had hesitations, 13.2% indicated that they were afraid of perceived academic repercussions from their college/department, 8.8% were afraid of the perceived criminal/legal repercussions for the individual possibly experiencing overdose and 5.7% were afraid for criminal/legal repercussions for themselves, 6.6% were afraid of perceived consequences of the hosts of the party. Only 0.9% indicated they would assume someone else would call for help, only 1.8% were afraid of the consequences from their parents, 0.4% concerned by financial consequences, 3.1%

were afraid for the other person's academic repercussions, and 3.1% were afraid of the person being upset with them.[65]

As seen in the Butler-specific questions of 2016, the 2018 survey again asked, "If you consider yourself someone in recovery from drugs or alcohol, what services would you like offered at Butler for recovery?" Again, students mentioned AA-like meetings and counseling. Other comments included suggesting resident assistants be more involved in the process, and a desire for more widespread information about how counseling and its privacy works.[65]

Summary of ICSUS Data

From 2012-2015 the rates of drug misuse decreased for OTC, own prescription misuse, and prescription misuse for the statewide Indiana ICSUS. The prescription stimulant Adderall was the most misused drug. Students did not approve of regular amphetamine use without a prescription, but more favorably viewed use once or twice. In the subsequent years 2016-2018, the same kinds of downward trends were not observed for stimulants, painkillers, and sedatives. However, students overall had a more negative opinion of using a nonprescribed prescription. For a comparison of the statewide ICSUS and Butler University results see Figures 7, 8, 9, and Tables 27, 28, and 29.

Over the same years, students at Butler University showed increased past rates of misusing medications not prescribed to them. However, until 2018 the campus rates were consistently lower than the state's misuse rates. Adderall, again, was the most frequently misused drug. In 2016, Butler students indicated nonmedically using medications without a prescription more frequently than the state average. The Butler-specific questions from 2016 and 2018 revealed that students in recovery wanted more counseling and supportive services, including academic

assistance. It also found that most students with a prescription use refusal as their primary safeguarding strategy for their medication.

UNIVERSITY ASSOCIATED HANDBOOKS, POLICIES, PROCEDURES, AND REFERENCED LEGAL CODE ANALYSIS

Summary of Findings

A search was conducted on the Butler University website for information regarding prescription medication, drug, or other substance use, academic dishonesty, and cheating. Using the local (internal) search option, keywords and their derivatives, abbreviations, alternate verb tenses, and multiples were queried including the terms policies, procedures, manual, handbook, drug, substance, cheating, academic dishonesty, and prescription.

The following documents were found with related information:

- Student Handbook
- Housing Guidelines
- HR Substance Abuse Policy
- Faculty Handbook
- Staff Handbook
- College of Pharmacy and Health Sciences (COPHS) Student Handbook
- Physician Assistant Program Handbook
- Music Education Handbook
- Butler University Marching Band Handbook
- Butler University Basketball Band Handbook
- Student Athlete Handbook
- Annual Comprehensive Combined Annual Security Report and Annual Fire Safety Reports

The Student Athlete Handbook was found from the athletics website, not the University website search. Other search results without relevant information included but were not limited to: The Butler IPPE and APPE Rotation Manual, the Butler Bulletin, the Voice Studio Handbook, the College of Education Student Teaching Handbook, the School of Music Undergraduate Handbook, and the School of Music Graduate Handbook.

While this work is primarily focused on student medication misuse, to see a broader picture of the University's existing stance on and services for substance misuse the Faculty Handbook, Staff Handbook, and HR Substance Abuse Policy are also included in this overview.

The Butler University Student Handbook

The Student Handbook is no longer printed or available as a PDF document. It is kept in its entirety on the University website.

Rules of Conduct

Within the Student Handbook are fourteen Rules of Conduct to which students are held. Related to the topic at hand were Rule 1, Rule 9, and Rule 14 as stated below:

> Rule 1: Violation of the University's published policies, regulations, or Rules of Conduct set out herein, including, but not limited to, those governing alcoholic beverages and controlled substances, academic dishonesty, campus solicitation, harassment, sexual misconduct, student organizations, or use of University facilities.
>
> Rule 9: Unauthorized use, possession, or distribution of any controlled substance or illegal drug, including, but not limited to, marijuana, lysergic acid diethylamide (LSD), heroin, or cocaine.
>
> Rule 14**:** Violation of any criminal law while enrolled in the University: federal, state, or municipal.[66]

The University also has a "plain speak" explanation of the Rules of Conduct published on its website under the "Our Approach to Alcohol: Clear Rules" page.[67] The "University Rules of Conduct" webpage also states, "A student may be found responsible for a violation of the Rules of Conduct if they attempt, facilitate, or engage in the prohibited conduct."[66] This broadly defines the cases for which the University may become involved in a situation or conduct an investigation. From a sanction standpoint, the University does not accept ignorance of the rules as an excuse for behaviors or attempted actions. Rule 14 provides grounds for University action

for an illicit act of any kind even if not specifically addressed in another rule, policy, procedure, or other such documents. Rule 1 is an overarching general rule to encompass all others and as such can be referenced in any conduct dispute. Rule 9 is more specific, allowing the University on a broad level to comply with federal or state requirements related to drugs or controlled substances. It also serves as a specific reference for any conduct issues with the substances listed or any substance with related properties to the listed substances.

On its "The University and the Public Law" webpage, the University makes it clear that students can have investigative and student conduct action taken simultaneously and independently from the University and the non-University authorities.[68] Furthermore, University and non-University authorities can simultaneously provide their own sanctions regardless of the others' decisions or findings.

Campus Life Policies- Housing Guidelines

Within the Campus Life Policies section of the Student Handbook is information on residency life policies and the Drug-free Schools and Community Act. Within the "Residency Life Policies" webpage, is the 2018 Housing Guidelines PDF. The following policy on Drugs and Other Controlled Substances was found under the Alcohol, Drugs, and Other Controlled Substances heading. It states**:**

> The use and/or possession of illegal/controlled drugs in housing facilities and their immediate vicinity is strictly prohibited. All cases of use, possession, cultivation or sale of drugs or evidence of use, possession, cultivation or sale of drugs will result in University student conduct procedures. Specifically, manufacture, sale, possession or use of narcotics, marijuana, hypnotics, sedatives, tranquilizers, hallucinogens and other similar known harmful or habit-forming drugs and/or chemicals, except as prescribed by a physician to the individual resident in possession of the medication, are prohibited by state law and University regulations.[69]

While this policy only applies to University-associated housing, not private residences, it indicates a more explicit policy than in the previously discussed Rules. The wording, "evidence

of use, possession, cultivation, or sale of drugs"[69] does not directly allow suspicions to be investigated, but it does permit investigations into acts that were not directly witnessed. This policy also addresses another aspect found in Rule 9: controlled substances. However, here it goes further to specify prescription medications particularly controlled-substance prescription medications. The wording, "except as prescribed by a physician to the individual resident in possession of the medication"[69] makes it clear that no one besides the prescription-holder should use the medication.

As a caveat, the use of the title "physician" is very limited in its scope. In Indiana, this would only refer to Medical Doctors (MD) and Doctors of Osteopathy (DO) (IC 25-22.5).[70] Yet, other healthcare professionals may prescribe medications for humans within their practice areas including physician's assistants (PA), advanced practice nurses (APNs, including nurse practitioners, nurse midwives, clinical nurse specialists), podiatrists (DPM), and optometrists (OD). In Indiana, a controlled-substance prescription would only be legal (fillable) from a properly licensed and DEA-registered physician, or an Indiana licensed and DEA-registered dentist or podiatrist, an Indiana licensed APN (IC 25-23-1-19.5) or PA (IC 25-27.5-5-6) within their scope of practice, quantity limits, and practice agreements (IC 16-42-19-5).[71–73] Optometrists, with the exception of tramadol (IC 25-24-3-16.5) and non-physicians from other states are not legal prescribers for controlled substances in Indiana.[74] Hence, a more encompassing word would be "prescriber."

The Housing Guidelines on Drugs and Other Controlled Substances, as it specifically encompasses prescriptions, brings in new nuances as a prescription is a legal document. Per the DEA:

> A prescription is an order for medication which is dispensed to or for an ultimate user. A prescription is not an order for medication which is dispensed for immediate

> administration to the ultimate user (e.g., an order to dispense a drug to an inpatient for immediate administration in a hospital is not a prescription). To be valid, a prescription for a controlled substance must be issued for a legitimate medical purpose by a registered practitioner acting in the usual course of sound professional practice.[75]

As defined in the United States legal code 21 USC 802(27): "The term 'ultimate user' means a person who has lawfully obtained, and who possesses, a controlled substance for his own use or for the use of a member of his household or for an animal owned by him or by a member of his household."[76]

The concept of a prescription medication was first defined in the Durham-Humphrey amendment to the Federal Food, Drug, and Cosmetic Act in 1951 [21 USC 353(b)(1)]. There it is defined as:

> (1) A drug intended for use by man which—
> (A) because of its toxicity or other potentiality for harmful effect, or the method of its use, or the collateral measures necessary to its use, is not safe for use except under the supervision of a practitioner licensed by law to administer such drug; or
> (B) is limited by an approved application under section 355 of this title to use under the professional supervision of a practitioner licensed by law to administer such drug; shall be dispensed only (i) upon a written prescription of a practitioner licensed by law to administer such drug, or (ii) upon an oral prescription of such practitioner which is reduced promptly to writing and filed by the pharmacist, or (iii) by refilling any such written or oral prescription if such refilling is authorized by the prescriber either in the original prescription or by oral order which is reduced promptly to writing and filed by the pharmacist. The act of dispensing a drug contrary to the provisions of this paragraph shall be deemed to be an act which results in the drug being misbranded while held for sale.[77]

As the beginning of the code indicates, prescription medications are designated as such because they are not safe for use without oversight. The later part of the code indicates that only certain people have authority to prescribe and hints at how highly regulated the dispensing of prescriptions is. Furthermore, within the realm of prescription medications are more restricted drugs called controlled substances. A controlled substance is defined as the following according to Title 21 USC 802(6): "a drug or other substance, or immediate precursor, included in schedule

I, II, III, IV, or V of part B of this subchapter."[76] The Attorney General looks at many factors when determining if a substance will be a controlled substance. These qualities are stated in the Controlled Substances Act Title 21 USC 811(c) as:

> (1) Its actual or relative potential for abuse.
> (2) Scientific evidence of its pharmacological effect, if known.
> (3) The state of current scientific knowledge regarding the drug or other substance.
> (4) Its history and current pattern of abuse.
> (5) The scope, duration, and significance of abuse.
> (6) What, if any, risk there is to the public health.
> (7) Its psychic or physiological dependence liability.
> (8) Whether the substance is an immediate precursor of a substance already controlled under this subchapter.[78]

Very broadly, controlled substances fall into the categories of anabolic steroids, cannabinoids, narcotics (opiates, cocaine), hallucinogens, central nervous system depressants, and stimulants. This may also include any derivatives, salts, isomers, precursors, or associated plants of the scheduled substances (21 USC 802 (16-20)).[76] Controlled substances are then further categorized into schedules, also known as categories. The properties which then require a substance to be scheduled as a controlled substance are as follows (21 USC 812(b)) in Table 30:

Table 30. Controlled Substance Properties for Scheduling[79]

	Abuse Potential	**Accepted Medical Use in the United States**	**Safety/Dependence**
Schedule I	High	None	Lack of accepted safety under medical supervision
Schedule II	High	Yes, severe restrictions	Severe psychological or physical dependence
Schedule III	Less than C-I or C-II	Yes	Moderate or low physical dependence or high psychological dependence
Schedule IV	Low potential vs. C-III	Yes	Limited physical dependence or psychological dependence vs. C-III
Schedule V	Low potential vs. C-IV	Yes	Limited physical dependence or psychological dependence vs. C-IV

The next section of the Federal Code (21 USC 812(c)) of the Controlled Substances Act lists out specific substances in their respective schedules.[79] Updates are published in the Code of Federal Regulations, Part 1308 of Title 21. It is important to note that states may designate additional substances as controlled substances or designate a controlled substance to a more restrictive class. Schedule I (C-I), commonly called illicit drugs, may not have a prescription written for them. Butler's Rule 9 mentions a few familiar Schedule I substances including heroin, marijuana, and LSD. Familiar C-II substances include methadone, fentanyl, hydrocodone, oxycodone, and amphetamine salts (Adderall), and methylphenidate salts (Ritalin). Common C-III drugs include anabolic steroids and codeine with acetaminophen (Tylenol No. 3; Tylenol No. 4). Common C-IV drugs are zolpidem (Ambien), tramadol, and alprazolam (Xanax). Schedule V substances include pregabalin (Lyrica) and Robitussin AC.[79]

As the Housing Guidelines indicate, it is unacceptable to share prescription medications. Furthermore, it is illegal to share prescription medications as indicated in the Indiana Code (IC 16-42-19-7) by the requirement of a legal prescription to have "adequate directions for use of the drug of device *by the patient* [emphasis added]" and elsewhere in IC 16-42-19-13, "A person may not possess or use a legend drug or a precursor unless the person obtains the drug: (1) on the prescription or drug order of a practitioner; or (2) in accordance with section 11(2) or 21 of this chapter."[80] This idea continues that if a patient dies, all of the prescriptions and refills ascribed to them are void (IC 25-26-13-25).[81] By specifically including prescriptions, the Housing Guideline's Drugs and Other Controlled Substances policy added another aspect to student conduct also supported by the Rules of Conduct.

Campus Life Policies-Drug-free Schools and Community Act

The legal implications of prescription medications and controlled substances are further reflected in the University's other portion of the Campus Life Policies section of the Student Handbook, the Drug-free Schools and Community Act page. Here it again repeats the prohibition of unauthorized controlled substance actions and the University's right to take student conduct action independently and simultaneously from criminal proceedings. It defines sanctions more explicitly, mentioning dismissal, suspension, probation, and restitution. This page also specifically summarizes legal codes in its bullet-pointed information in Point 3 and Point 5, as follows:

> Point 3: Applicable legal sanctions under federal, state, and local law state that it is unlawful to possess a controlled substance, including marijuana, cocaine, LSD, PCP, heroin, designer drugs, etc. (Federal Law Title 21 USC, Sections 841, 844, 845). The penalty for simple possession of such substances is a fine and/or imprisonment. The penalties increase if the possession includes intent to manufacture, distribute, or dispense a controlled substance, especially if it is near a public or private elementary, vocational or secondary school, or a public or private college or University. Violators of this law may also be subject to civil penalties.
>
> Point 5: It is a violation of Indiana state law for anyone to use, possess, manufacture, distribute or dispense controlled substances (Ind. Code Sec. 35-48-4-1 et seq.). Penalties include fines and/or imprisonment. Again, penalties increase if such activities take place near public parks, housing projects, or schools.[82]

This webpage also addresses the implications for federal financial aid recipients and the health risks of abuse and available campus resources for help. The summaries of the noted legal codes are brief but thorough. A more in-depth look at the sections of Title 21 USC as mentioned in Point 3 is warranted due to the extensiveness of the legal code and the severity of the financial and incarceration consequences students are held to. Furthermore, as the Controlled Substances Act is a federal code, all members of the Butler Community fall under its restrictions.

Title 21 U.S.C. 841(a) states that "Except as authorized by this subchapter, it shall be unlawful for any person knowingly or intentionally— (1) to manufacture, distribute, or dispense, or possess with intent to manufacture, distribute, or dispense, a controlled substance; or (2) to create, distribute, or dispense, or possess with intent to distribute or dispense, a counterfeit substance."[83] 21 U.S.C. 841(b) begins to cover the penalties mentioned in Point 3 with specific sanctions for varying masses and quantities of substances. Marijuana, heroin, phencyclidine (PCP), methamphetamine, LSD, and cocaine have very specific quantity amounts to determine penalties (21 U.S.C. 841(b)(1)(A); 21 U.S.C. 841(b)(1)(B)). However, there are also sanctions described by each schedule of controlled substances and the number of offenses. The penalties are greater the lower the schedule of drug and if the offender has a previous felony drug conviction.[83] The following Table 31 includes specifics.

Table 31. 21 U.S.C. 841 Punishments for First Offenses by Schedule of Substance[83]

	Prison Sentence	**Fine if defendant is an individual***	**Fine if defendant not an individual***
Schedule V	≤1 year	≤$100,000	≤$250,000
Schedule IV	≤5 years	≤$250,000	≤$1,000,000
Schedule III	≤10 years; ≤15 years if death or serious injury	≤$500,000	≤$2,500,000
Schedule I/II	≤20 years; ≥20 years to life if death or serious injury	≤$1,000,000	≤$5,000,000
*Not to exceed the provisions of Title 18			

Title 21 USC 844(a) covers the penalties for simple possession. It again repeats that it is illegal to possess a controlled substance without legal prescription. It also covers the federal ephedrine, pseudoephedrine, and phenylpropanolamine purchasing restrictions (9 grams of the base within thirty days) as these may be bought "behind-the-counter" without a prescription. The code then defines general penalties and then specific penalties for the possession of flunitrazepam. As in 21 U.S.C 841, the penalties increase if there are prior substance-related

convictions. Important to note is that once convicted, the offender is responsible for the investigation costs in addition to any monetary penalties and/or imprisonment.[84] See Table 32 below for specifics.

Table 32. 21 U.S.C. 844(a) Penalties for Simple Possession[84]		
	Prison Sentence	**Fine***
1st offense	≤1 year	≥ $1000
2nd offense	≥ 15 days and ≤2 years	≥ $2500
3rd or more offense	≥ 90 days and ≤3 years	≥ $5000
*Not to exceed the provisions of Title 18		

Title 21 U.S.C. 845 has been re-codified into 21 U.S.C. 859, 21 U.S.C. 860, and 21 U.S.C. 861 as of the year 1990. 21 U.S.C. 859 includes codes on the distribution of controlled substances to persons under age twenty-one by someone eighteen years of age or older, part (a) defines the penalties for first offenses and part (b) second offenses. It refers to 21 USC 841(b)(1)(A) for third or subsequent convictions. See Table 33 of 21 U.S.C. 859(a) below:

Table 33. 21 U.S.C. 859*^[85]			
	Punishment	**Prison Sentence^^**	**Supervised Release**
1st Offense	2 times maximum punishment	≥1 year	≥2 times maximum
2nd Offense	3 times maximum punishment	≥1 year	≥3 times maximum for 1st offense
* Punishments given in 21 U.S.C. 841(b) ^ Excludes marihuana if <5 grams ^^ Unless higher minimum punishment given in 21 U.S.C. 841(b)			

Returning to the related portion of 21 USC 841(b)(1)(A), it states:

> If any person commits a violation of this subparagraph or of section 849, 859, 860, or 861 of this title after two or more prior convictions for a felony drug offense have become final, such person shall be sentenced to a mandatory term of life imprisonment without release and fined in accordance with the preceding sentence. Notwithstanding section 3583 of title 18, any sentence under this subparagraph shall, in the absence of such a prior conviction, impose a term of supervised release of at least 5 years in addition to such term of imprisonment and shall, if there was such a prior conviction, impose a term of supervised release of at least 10 years in addition to such term of imprisonment. Notwithstanding any other provision of law, the court shall not place on probation or suspend the sentence of any person sentenced under this subparagraph. No person

> sentenced under this subparagraph shall be eligible for parole during the term of imprisonment imposed therein.[83]

21 U.S.C. 860 includes codes on the distribution or manufacturing of controlled substances in or near schools and colleges, and 21 U.S.C. 861 includes the employment or use of persons under eighteen years of age in drug operations and the distribution of controlled substances to pregnant individuals. 21 U.S.C. 860 follows the pattern of 21 U.S.C. 859 in that part (a) defines the penalties for first offenses, part (b) second offenses, and third or subsequent offense again follow section 21 U.S.C. 841(b)(1)(A). See Table 34 for a summary of the sanctions in 21 U.S.C. 860. It also has a part (c) about employing children to distribute drugs near schools or playgrounds, (d) suspension of sentence; probation; parole, and (e) for definitions. The geographic boundaries as written in 21 U.S.C. 860 are provided below:

> Any person who violates section 841(a)(1) of this title or section 856 of this title by distributing, possessing with intent to distribute, or manufacturing a controlled substance in or on, or within one thousand feet of, the real property comprising a public or private elementary, vocational, or secondary school or a public or private college, junior college, or university, or a playground, or housing facility owned by a public housing authority, or within 100 feet of a public or private youth center, public swimming pool, or video arcade facility, is (except as provided in subsection (b) of this section) subject to…[86]

Table 34. 21 U.S.C. 860(a) and 21 U.S.C. 860(b)*^[86]

	Punishment	**Fine**	**Prison Sentence^^**	**Supervised Release**
1st Offense	2 times maximum punishment	≤2 times maximum	≥1 year	≥2 times maximum
2nd Offense	3 times maximum punishment for 1st offense	≤3 times maximum	≥3 year to life	≥3 times maximum of 1st offense

* Punishments given in 21 U.S.C. 841(b)
^ Excludes marihuana if <5 grams
^^ Unless higher minimum punishment given in 21 U.S.C. 841(b)

21 U.S.C. 861(f) addresses the distribution of controlled substance to a pregnant individual. While not as common a situation on a university campus, it is possible. The penalties for providing a pregnant individual with controlled substances are equal to those of using persons

under eighteen years old in drug operations: twice the maximum penalty for a first offense, no probation, and no parole until the minimum imprisonment sentence is served.[87]

As mentioned in Point 5, IC 35-48-4 includes many of Indiana's codes that address the possession, distribution, manufacture, and/or selling of a controlled substance. It also addresses counterfeits and drug paraphernalia. Similar to the 21 U.S.C federal codes, the Indiana Code associates differing masses and quantities of pure or adulterated controlled substances with different levels of felonies or misdemeanors**.** Typically, the greater the quantity, the higher the Schedule, and with increasing number of offenses the larger the penalty. Again, similar to the federal code, there were increased penalties for being near or on school property or a public park in the Indiana Code. Indiana also included school busses into its geographic limitations as well as decreased the distance to be penalized to only 500 feet, versus 1,000 feet in the federal code.[86,88]

Academic Policies

Returning again to the Student Handbook, there is a section within it entitled Academic Policies. It is partially comprised of a policy on Academic Integrity in which it defines academic dishonesty as:

> **Cheating** includes receiving or giving help on papers, experiments, reports, compositions, projects, or examinations without the instructor's permission. It also includes submitting part of or all of the completed assignment of another person as one's own work. Of special note and concern is the use of purchased research papers. It is a violation of the regulations of Butler University for a student to purchase a term paper. Cheating is also using unauthorized materials and aids, such as books, one's own notes or those of another, and calculators during an examination.
>
> **Plagiarism** is the fraudulent misrepresentation of any part of another person's work as one's own. Submitting any writing, including take-home exams, that does not properly acknowledge the quoting or paraphrasing of another person's words, or that fails to give proper credit for another person's ideas, opinion, or theory is plagiarism. Any unacknowledged use of sources to which one is indebted including but not limited to, music, video, audio, theatre projects, compositions, website, and computer software constitutes plagiarism.

> **Fabrication** is the falsification or invention of information or data in reports, lab results, bibliographies, or any other academic undertaking.
>
> **Facilitating** academic dishonesty involves assisting someone in an act of dishonesty.
>
> **Interference** includes the theft, alteration, destruction, or obstruction of another student's work. Interference may take the form of the theft, defacements, or destruction of resources, e.g., library periodicals and books, so as to deprive other students of information.[89]

The definition of cheating is quite broad and encompassing. It does not, however, specifically address the misuse of prescriptions or other substances for the purpose of enhancing academic performance. This issue could possibly be interpreted within the phrase "unauthorized materials and aids," although it points to more object-oriented ways of cheating than enhancement-focused cheating. The Academic Integrity policy is the policy to which Butler University syllabi defer.

The Academic Integrity site also contains the courses of action that occur if academic dishonesty is suspected. The actions partially depend upon where the student's academic dishonesty takes place in a course in which the student is enrolled, if it is not related to a course in which the student is enrolled, or if it occurs in a campus computer facility. In this information, the Student Conduct Board/University Appeals Board is mentioned, which hears appeals of academic integrity and general behavior. A simplified version of the academic dishonesty investigation and sanction process is depicted in Figure 10.

There is also a Professional Conduct portion within the Academic Integrity section of Academic Policies. It goes as follows:

> Allegations of unethical or unprofessional conduct of a student enrolled in or applying to a professional degree program may be addressed by the Dean of the appropriate college according to the policies and procedures of the college. A student found to be in violation of the college's policies may be subject to a grading sanction as well as suspension or termination from their professional degree program.[89]

This Professional Conduct policy alludes to other governance such as those seen in the College of Pharmacy and Health Sciences Handbook and the Physician Assistant Program Handbook, which will be examined later.

The Faculty Handbook and The Staff Handbook

The 2018-2019 Faculty Handbook refers to the HR Substance Abuse Policy and the Student Handbook for issues related to drugs or cheating.

The Staff Handbook has more specific information on substance abuse, but primarily refers to the HR Substance Abuse Policy. Within the Staff Handbook are the "Workplace Standards" which include terms for the immediate termination of employment including: the use, possession, consumption, or sale of intoxicants, including alcohol or controlled substances, contrary to the University's Substance Abuse policy.[90] It also describes the Employee Assistance Program. It provides up to three free confidential, professional counseling sessions per person for employees and their immediate family members for many issues including drug or alcohol abuse.[90]

HR Substance Abuse Policy

The HR Substance Abuse Policy was approved August 12, 2010 to comply with the Drug Free Workplace Act of 1988. It defines illegal drugs, legal drugs, and drug paraphernalia as:

> "Illegal drugs" are drugs or controlled substances which are: (1) not legally obtainable; or (2) legally obtainable, but not obtained or used in a lawful manner or in accordance with a valid prescription. Examples of illegal drugs include, but are not limited to, marijuana, cocaine, and hallucinogens. The term "illegal drugs" also refers to mind-altering and/or addictive substances, which are not sold as drugs or medicines, but are used for mind or behavior-altering effect.
>
> "Legal drugs" are prescribed or over-the-counter drugs which are legally obtained and used for the purpose for which they were prescribed and/or sold.

> "Drug paraphernalia" includes raw materials, instruments, devices or other objects intended for introducing an illegal drug into the body.[91]

The policy also includes drug use prohibitions, including:

> A. The use, sale, purchase, possession, manufacture, distribution, or dispensing of illegal drugs or drug paraphernalia on University property is against University policy and may result in immediate termination.
>
> B. All employees are prohibited from reporting to work or working if there are illegal drugs present in the employee's body. The presence of illegal drugs may be determined by an applicable test, as outlined in section E, "Testing of Applicants & Employees." Employees who violate this policy are subject to disciplinary action, up to and including termination.
>
> C. Legal drugs may also affect the safety of the employee or fellow employees, members of the University community, or members of the public. Therefore, any employee who is taking any legal drugs which might impair his/her own safety or the safety of others, or the performance of his/her responsibilities, shall advise his/her supervisor before reporting to work so that an interactive dialogue can be held to determine whether any accommodation or modification of responsibilities is appropriate.
>
> D. Refusal to promptly submit to, cooperate with, efforts to tamper with, or failure to pass a required drug test under this policy will result in disciplinary action, up to and including termination.[91]

It also discusses reasonable-suspicion testing of employees. While this policy would not apply to students unless they were also employees of the University, it does provide a framework and reference for other policies within the University regarding any of the covered topics.

2018-2019 College of Pharmacy and Health Sciences Student Handbook

The 2018-2019 College of Pharmacy and Health Sciences (COPHS) Student Handbook has unique policies within it regarding conduct and substance use that its students must follow. Many of the policies derive from the COPHS' Professional Conduct Code. The definitions of unprofessional conduct are broadly stated as acts of academic dishonesty, incivility and unethical or otherwise unprofessional behavior, substance abuse, loss of or failure to procure professional credentials, and/or misconduct or illegal activities.[92]

Academic dishonesty includes plagiarism, cheating, fabrication, interference, and collusion.[92] Cheating is defined as in the Butler Student Handbook, with an additional specification at the end: Attempts at cheating shall be interpreted as cheating having taken place. The COPHS Handbook also expands and renames the fifth component of academic dishonesty found in the Student Handbook, using collusion instead of facilitation. Collusion in is defined as "assisting other students in acts of academic dishonesty or failure to report suspected incidences. This assistance could include unintentional or inadvertent assistance by not exercising proper care to protect the integrity of academic assessments whether formative or summative."[92]

The COPHS Handbook defines substance abuse in terms of legal substance misuse (alcohol), illicit substance misuse, and pharmaceutical misuse.[92] It specifically cites misappropriation, illegal possession, and the use or sale of pharmacologically active ingredients as unprofessional conduct. Additionally, the COPHS Handbook states that a report of unprofessional conduct is sufficient for a review. The Professional Conduct Code states that faculty and students are responsible for reporting even alleged violations. Students must self-report their own violations regardless of where they occurred within ninety-six hours of the alleged event. This policy continues to explain what an instructor must do, when the Associate Dean for Student Affairs and/or the COPHS Academic and Professional Affairs Committee becomes involved, and the procedures that will continue.[92]

The COPHS Student Handbook also has a Student Substance Use, Abuse or Dependency Policy. All students enrolling in COPHS must sign this statement. Within the policy it encourages students, faculty, or staff to report or self-report their concerns to the Associate Dean of Academic Affairs. The policy continues to explain that after a review, the student may be required to undergo a professional assessment based upon certain behaviors and circumstances.

If found that a student has a substance issue, the student will undergo a treatment and recovery plan and sign a release form to let the COPHS know of their progress and adherence. The student is responsible for the cost. If the student does not follow the plan, there will be disciplinary action including possible dismissal or termination from the College or the University. If treatment is successful, the Associate Dean will help with the student's reintegration into school.

2018-2019 Physician Assistant Program Handbook

The Physician Assistant (PA) Program Handbook has policies related to substance abuse, drugs, and/or academic integrity not found in the COPHS Handbook. One of these is the Drug Screening Policy, which explains the purpose, timing, and possible consequences of a positive of drug screen.[93] There are also the Didactic and Clinical Year Professionalism Requirements that encompass appearance and attire, preparation, behavior/attitude, communication, attention and participation, respect for others, and honesty. The PA Handbook also has two honor codes specific to physician assistant students and their accreditation standards. It is mandatory that students sign the Code which is tailored to their didactic or clinical year.[93]

Other Handbooks

Music Education Handbook

Within the Jordan College of the Arts and the College of Education, there is the 2017-2018 Music Education Handbook. Within it is a section entitled "Criminal Background Check," and within its Part 3 it states:

> Students are advised that if during the course of the placement the student is convicted in Indiana or any other jurisdiction of any of the following offenses… an offense *relating to controlled substances under I.C. 35-48-4*… an offense that is substantially equivalent to any of the offenses listed in this subsection in which the judgment of conviction was entered under the law of any jurisdiction or an attempt to commit anyone of the foregoing

> offenses, *the student must immediately notify the University and the School Corporation of such fact*.[94] [Emphasis added]

The Indiana Code 35-48-4 was discussed previously in the Butler Student Handbook under the Rules of Conduct-Rule 5. The codes within that section address the sanctions for the possession, the distribution, the manufacture, and/or the selling of a controlled substance. If a student was found or attempted to have broken those laws, they would not only have committed an illegal action, but would also have violated University rules and be subject to those sanctions. This policy places the responsibility on the student to tell both the University and the school at which they are teaching of these crimes. Interestingly, no such statement appeared in the College of Education Student Teaching Handbook.

2018 Butler University Marching Band Syllabus and Handbook and the Butler University Basketball Band Handbook and Syllabus

In the 2018 Butler University Marching Band Syllabus and Handbook under "Special Concerns" its states:

> In accordance with the University policy, THE USE OF ANY ILLEGAL SUBSTANCE IS ABSOLUTELY NOT TOLERATED WITHIN THIS GROUP. This goes for any time the band is gathered for a function (rehearsals, performances, in sections, trips, etc.) 90% of the band is under the legal age to consume any alcoholic beverage, this includes ALL FORMS of illegal substances – not only drugs. Failure to comply with this policy will result in dismissal from the band and an automatic grade of "F".[95] [sic]

While not a typical writing or examination-based class, this syllabus/handbook makes it clear the consequences of illegal substance use. Similarly, the 2018-2019 Butler University Basketball Band Handbook and Syllabus, written by the same professor, under "Performance Etiquette and Conduct" section states that "smoking, illegal substances, alcohol usage, and offensive language of any kind to any person (including the heckling of opposing team players, coaches, referees, and/or fans) will not be tolerated and may result in the removal of a member from the

ensemble."[96] Then under the "Travel" section of the handbook/syllabus it states that "the use of alcohol or any illegal substances throughout the band's travel will not be tolerated. Violators will be dismissed from BUBB and/or reported to BU for additional consequences."[96]

Student Athlete Handbook

Student athletes are special subset of students at a University. They are under additional restrictions from the National Collegiate Athletic Association (NCAA), athletic conferences, and their athletic departments. Butler has a Student-Athlete Code of Conduct. There are also thirteen Student-Athlete Standards of Conduct. The first five of which relate most directly to substance use and are listed below:

> 1) You shall abide by all local, state, and federal laws.
>
> 2) You shall follow NCAA, Big East/Pioneer Football League, University, Athletic Department and your individual team's policies, rules and regulations
>
> 3) You shall follow all academic rules and procedures established by the University, the athletic department and your coach or coaches.
>
> 4) You must consent to participate in the Department of Athletics mandatory drug testing program. A student- athlete will not be allowed to participate in any intercollegiate athletic team unless he/she fully participates in this drug testing program. The full context of the Butler Drug Testing policy can be found in this handbook and at www.butlersports.com.
>
> 5) On a team trip, or at any team related function, you are prohibited from consuming alcohol, using tobacco products or using or possessing illegal substances. This includes, but is not limited to, travel to and from an event, home games, team gatherings before or after games, and any time the team is together in an official capacity.[97]

Standards nine through thirteen discuss implications for arrests, misdemeanors, and other conduct issues. They read as follows:

> 9) If you are arrested, you will immediately be placed on suspension, the nature of which shall be determined in the sole discretion of the Department of Athletics, until the facts of the incident are reviewed by the Director of Athletics, the applicable Sports Administrator and/or the head coach (and other appropriate University personnel, as deemed necessary by the University).

> 10) If you are charged with a felony, you will not be permitted to represent Butler University Athletics in competition until such time as the charge is resolved and all legal, NCAA, Big East/Pioneer Football League, University and athletic department conditions for reinstatement have been met, unless otherwise approved by the Director of Athletics.
>
> 11) If you are charged with a misdemeanor, all subsequent sanctions under this Student-Athlete Standards of Conduct will be handled by the Head Coach, the Sports Administrator for the sport, and the Director of Athletics. If misdemeanor charges result in a sentence which involves jail time, you will not be permitted to represent Butler University Athletics in competition until that time has been served, unless otherwise approved by the Director of Athletics.
>
> 12) All arrests for any crime are reported to the Office of Student Affairs and you may be subject to University action.
>
> 13) You shall avoid any other behavior or conduct that is inconsistent with the Statement of Purpose or that otherwise reflects negatively (in sole discretion of the University) on you, your team and/or teammates, your coach(es), the Department of Athletics or the University.[97]

There is a portion of the Student-Athlete Handbook entitled "Services Dealing with Alcohol and Other Drugs" directing readers to the University's Health Services. Under the Academic Policies and Procedures section it repeats the importance of Academic Honesty:

> Students have an obligation to themselves, to their peers and to the institution to uphold the integrity of Butler University and of higher education by (1) refusing to participate, either directly or indirectly, in acts of academic dishonesty, and (2) discouraging such acts by others. A student who collaborates with another in an act of dishonesty shares the guilt for the offense. Academic dishonesty in all of its manifestations is a deplorable activity, a betrayal of personal values, and a rejection of the basic goals of learning to which the Butler University community is committed. Students must be fully aware of what constitutes academic dishonesty; claims of ignorance cannot be used to justify or rationalize dishonest acts. Academic dishonesty can take a number or forms, including but not limited to cheating, plagiarism, fabrication and interference.
>
> Academic dishonesty is a serious offense, harming both the Butler community and the perpetrator; therefore, the university has adopted specific procedures for dealing with possible instances of academic dishonesty. Under university regulations, outlined in the current copy of the Butler University Student Handbook, the individual instructor, dean, or computer system managers have wide latitude in handling cases involving academic dishonesty within their various departments, colleges or computer facilities. Instructors or system managers, at their discretion, also may refer matters of academic dishonesty to the dean of student affairs.[97]

It also explains the Butler University Drug Testing Policy, which is separate from the NCAA drug testing policy, which student athletes are held to. This policy includes "All current student-athletes including red-shirts, medical red-shirts and student-athletes who are academically ineligible will be subject to drug testing."[97] There are four types of drug testing: team, reasonable suspicion, re-entry, and follow-up testing. The policy allows for no-notice testing. It lists banned substances which are defined as mood-altering substances (alcohol, illicit substances) and performance enhancing drugs. It also references the NCAA Banned Drugs list (provided as Appendix A), which includes the categories of stimulants, anabolic agents, diuretics and other masking agents, street drugs, peptide hormones and analogues, anti-estrogens, and beta-2 agonists.[98] Later it categorically lists common banned substances. The Drug Testing Policy also identifies restricted procedures and contains the NCAA Supplement policy.[97]

There is a Medical Exemption process that allows legitimate, well-documented medical use for banned substances.[97] It requires a note from the prescribing physician for their medical file. The Drug Policy then continues to explain the drug testing procedures and positive test results processes as well as explain the self-referral program.

The Student Athlete Conduct Violations section discusses how student athletes must follow all the University's rules, policies, and procedures as well as state and federal laws. The Department of Athletics also handles student-athlete misconduct declaring "coaches and athletic administrators have sole authority for infractions of team rules that extend outside the realm of the University's rules and policies."[97] It then outlines what are violations and who may be involved in the process, such as the Vice President for Student Affairs, Vice President and/or Director of Athletics, and Coaches. Importantly, it states that "all athletic personnel are designated Campus Security Authorities and therefore must report knowledge of all Clery

reportable crimes according to the CSA guidelines."[97] The Student-Athlete Handbook then describes possible sanctions and encourages student-athletes to seek help voluntarily for substance issues or anger management.

2015-2017 Annual Comprehensive Combined Annual Security Report and Annual Fire Safety Reports

The Annual Security Report is the way the University reports under the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act. They list the incidence of different criminal acts on and around the University campus. Campus Security Authorities must report criminal incidents that were not reported to the University police. Campus Security Authorities may include University police, security guards, parking enforcement, deans, student housing officials, athletic directors, faculty advisors for student organizations, and team coaches, etc.[99]

Butler's report does not differentiate between types of drugs (illicit, prescription, controlled substances, etc.) within its drug-related arrest and disciplinary action categories. For "Drug Law Arrests" in 2017, there were fifteen total arrests with five of those within residential facilities.[100] In 2016, there were twenty-two total arrests with seventeen being in residential facilities.[101] In 2015, there five arrests total all occurring within residential facilities.[102] For "drug law violations referred for disciplinary action" in 2017 there were twenty-five referrals, twenty-four of which were in residential facilities.[100] In 2016, there were eleven referrals, nine of which were in residence facilities.[101] In 2015, there were twenty-one referrals all which occurred in residence halls.[102] Figure 11 demonstrates the violations by arrest and referral from 2012-2017.

Summary: For a comparison of the various Butler policies and handbooks see Table 35.

COMPARATOR UNIVERSITY POLICIES AND RESOURCES

As a comparator, Duke University (as discussed by Aikins et al. in their article *Academic Doping: Institutional Policies Regarding Nonmedical use of Prescription Stimulants in U.S. Higher Education*) has an academic policy that includes using medications as an academic infraction. For context, Duke is a private university in Durham, North Carolina, with about 7,000 undergraduates and 8,900 graduate students.[103] Its undergraduates identify as 52% female, 44% Caucasian, 21% Asian-American, 10% African-American, 9% foreign, and 9% Hispanic. It has a college of arts and sciences, a Divinity School, Graduate School, and schools of law, medicine, nursing, business, engineering, public policy, and the environment.[103]

The *2018-2019 Duke Community Standard in Practice: A Guide for Undergraduates* (*The Guide*) is the primary resource that includes the unique academic policy. The Guide begins with the Duke Community Standard, which goes as follows:

> Duke University is a community dedicated to scholarship, leadership, and service and to the principles of honesty, fairness, respect, and accountability. Citizens of this community commit to reflect upon and uphold these principles in all academic and nonacademic endeavors, and to protect and promote a culture of integrity.
> To uphold the Duke Community Standard:
> - I will not lie, cheat, or steal in my academic endeavors;
> - I will conduct myself honorably in all my endeavors; and
> - I will act if the Standard is compromised.[104]

The Duke Community Standard is then followed by the Undergraduate Policies, which are listed alphabetically, placing the Academic Dishonesty Policy first and foremost. This policy has three parts as mentioned in the Community Standard: lying, cheating, and stealing. The cheating section has the unique policy within it. It first defines cheating and then goes more in depth as to what constitutes plagiarism. This beginning part of this section goes as follows:

> Cheating is the act of wrongfully using or attempting to use unauthorized materials, information, study aids, or the ideas or work of another in order to gain an unfair advantage. It includes, but is not limited to:

- plagiarism on any assignment
- giving unauthorized aid to another student or receiving unauthorized aid from another person on tests, quizzes, assignments, or examinations
- using or consulting unauthorized materials or using unauthorized equipment or devices on tests, quizzes, assignments, or examinations
- altering or falsifying any information on tests, quizzes, assignments, or examinations
- using any material portion of a paper or project to fulfill the requirements of more than one course unless the student has received prior faculty permission to do so
- working on any examination, test, quiz, or assignment outside of the time constraints imposed
- **the unauthorized use of prescription medication to enhance academic performance** [emphasis added]
- submitting an altered examination or assignment to an instructor for re-grading; or
- failing to adhere to an instructor's specific directions with respect to the terms of academic integrity or academic honesty[104]

Further in *The Guide* is Duke's Drugs and Drug Paraphernalia Policy is similar to Butler's Drug-Free School and Related Act policies.[104] Currently, Butler's wording does not verbatim state drug paraphernalia, but the reference legal codes (IC 35-48-4 et seq.) encompass it. The Duke policy, like Butler's, describes possible sanctions for not following the policy and provides information on resources for persons struggling with substance use. Duke, however, directs readers to this information in Appendix F of *The Guide*. This appendix covers health effects, short-term and long-term consequences, and then goes in depth into federal penalties and sanctions then North Carolina specific laws, followed by listings of resources available for concerns.[104] The *Duke Community Standard in Practice: A Guide for Undergraduates'* Appendix F is provided as Appendix B in this work. Also included in *The Guide* is an "Optional, One-Time Faculty-Student Resolution Process for Cases of Academic Dishonesty Involving Undergraduates" which is similar to the Butler first-infraction academic dishonesty in an enrolled class procedure.[104] It is provided as Appendix C in this text.

Apart from *The Guide* Duke has other resources relating to academic honesty, such as an Academic Integrity Council. Within the Council's website (integrity.duke.edu) it has a section

for Faculty with tips on promoting integrity and how to report a possible violation. It also provides information on the Honor Council, Undergraduate Conduct Board, and directs graduate students to their respective ethical codes.[105] Additionally, the Duke Student Affairs website for Student Conduct has online ways to report conduct incidents, university conduct statistics, and an explanation of the undergraduate disciplinary system. Butler is not without similar resources, as it has a Student Conduct Board that hears appeals of academic integrity and general behavior and conduct information under different sections of the University website such as the Community of C.A.R.E page and Academic Dishonesty pages.

Regarding health services, Duke offers similar but more expansive types of medical care. Their Counseling and Psychiatric Services (CAPS) offers similar resources to Butler's Counseling and Consultation Services (CCS). CAPS' website links to the DukeReach website that gives options on how to report a concern for a student and a brief page for parents, family, and friends stating common reasons for using Consultation Services, guides for "Parenting from a Distance" and "Parenting International Students."[106] The CAPS' Consultation tab also links to this information as well as information for faculty, staff, and administrators.

Duke has a holistic wellness model similar to Butler (DuWell vs. BUBeWell).[107] The DuWell website has a tab for Drug Education and Harm Reduction, which focuses primarily on alcohol, but also mentions screening for alcohol and drug use/abuse and has a section on Supporting Those in Recovery with portions for Students in Recovery and for Helping Others. The Students in Recovery tab mostly provides information for those suffering with alcohol, but also tells about DukeReach case management services. The Helping Others tab has talking tips and self-reflection questions regarding friends' use and again provides phone numbers and links to resources.[107] See Table 36 for a side-by-side comparison of the two universities.

Table 36. Comparison of Butler University and Duke University Policies, Procedures, and Related Resources[66,82,89,104–106]		
	Butler	**Duke**
Principle-based Code or Standard	-	Duke Community Standard
Conduct Accountability Measures	14 Rules of Conduct, Policies, Rules, Procedures	Undergraduate Policies and Procedures
Student Conduct System	first-infraction academic dishonesty in an enrolled class procedure	Optional, One-Time Faculty-Student Resolution Process for Cases of Academic Dishonesty Involving Undergraduates
Student Conduct System Decision Bodies	Student Conduct Board	Undergraduate Conduct Board, Academic Integrity Council
Student-led conduct system involvement	-	Duke University Honor Council
Drug Policies	Drug-free Schools and Campuses Act Compliance; Rules 1, 9, 14	Drugs and Drug Paraphernalia Policy
Academic dishonesty definition	Cheating, plagiarism, fabrication, facilitation, interference	Lying, cheating, stealing
Academic Dishonesty Obligations	-	Obligatory to act under Duke Community Standard
Cheating Definition	-Receiving or giving help on papers, experiments, reports, compositions, projects, or examinations without the instructor's permission - Submitting part of or all of the completed assignment of another person as one's own work -Purchasing a term paper -Using unauthorized materials and aids, such as books, one's own notes or those of another, and calculators during an examination	-Wrongfully using or attempting to use unauthorized materials, information, study aids, or the ideas or work of another in order to gain an unfair advantage -Giving unauthorized aid to another student or receiving unauthorized aid from another person on tests, quizzes, assignments, or examinations -Failing to adhere to an instructor's specific directions with respect to the terms of academic integrity or academic honesty -Plagiarism -Altering or falsifying any information on tests, quizzes, assignments, or examinations -Using any material portion of a paper or project to fulfill the requirements of more than one course unless the student has received prior faculty permission to do so -Using or consulting unauthorized materials or using unauthorized equipment or devices on tests, quizzes, assignments, or examinations -Working on any examination, test, quiz, or assignment outside of the time constraints imposed -The unauthorized use of prescription medication to enhance academic performance - Submitting an altered examination or assignment to an instructor for re-grading
Reporting Methods/ Resource Information	Community of C.A.R.E.	DukeReach
Psychological Support Services	Counseling and Consultation Services	Counseling and Psychiatric Services
Wellness Programming	BUBeWell	DUWell

EXISTING BUTLER UNIVERSITY RESOURCES

Butler has many ongoing efforts to promote awareness and safe practices with substances, with most resources being dedicated to alcohol. Still, many of these resources overlap with drugs. Every incoming student is required to take an online prevention education course.[108] The current program is called Think About It; previously MyStudentBody was used. Similarly, all incoming students participate in peer-led Bystander Intervention Training, using the Concern, Assume responsibility, React, Evaluate and follow up (C.A.R.E.) model during their orientation week to campus.[109] This mandatory orientation also has a part that introduces students to Butler's holistic wellness model, BUBeWell. If a student is an incoming student-athlete, they are required to complete MyPlaybook training. MyPlaybook was developed by the NCAA and covers NCAA banned substances, drug testing, and other substance related concepts.

It is estimated that 4% of students on a collegiate campus are in recovery from a substance use disorder at all times.[110] Collegiate recovery programs are peer-based programs to help university students, which meet on campus. They have no standardized accreditation, but there are seven core standards created by the Association for Recovery in Higher Education. Butler is not a listed Association for Recovery in Higher Education Collegiate Recovery Program university. It is working towards becoming a recovery-friendly campus and is partnering with the JED Foundation, a nonprofit organization that focuses on emotional health and suicide prevention.

All students have access to free consultation and therapy in individual, group, and substance support groups and confidential pastoral counseling.[111,112] The University's Health Services and Counseling and Consultation Services also offer psychiatric services, crisis intervention and assessment, wellness visits, and drug testing. The Let's Talk program is a drop-in service that offers informal, confidential, consultation for students who wish to talk about concerns and get

help problem-solving.[113] It helps connect students to other resources. If a student utilizes Counseling and Consultation Services, they are required to take the Intake Risk Factor Assessment/AUDIT. If a student's needs are beyond the capabilities of the available services on campus, community referrals are available.[111]

The Counseling and Consultation Services website under "self-assessments and online health topic information" has a section dedicated to "Pot, pills, and other drugs." It provides links to resources. Currently, these include[114]:

- Bitter Pill; https://www.in.gov/bitterpill/
- RxSafety Matters; http://www.rxsafetymatters.org/
- Drug Rehab Treatment; https://www.recovery.org/browse/indiana/
- Above the Influence; https://abovetheinfluence.com/
- Higher Education Center for Alcohol and Other Drugs; http://hecaod.osu.edu/students/
- GenerationRx; https://www.generationrx.org/toolkits/college/
- Learn About Marijuana; http://learnaboutmarijuanawa.org/
- National Institute of Drug Abuse; https://www.drugabuse.gov/publications/research-reports/marijuana/letter-director
- Overdose Lifeline; https://www.overdose-lifeline.org/

Specific groups on campus also have efforts to promote and enforce safe use of controlled substances. For example, resident assistants receive some training on how to handle situations where students may be under the influence. They do not at this time receive naloxone training but do receive additional C.A.R.E training. Student orientation guides who help with the orientation activities conduct the bystander intervention training and introduce the University's wellness model to new students, but do not go deeply into substance use. The Interfraternity Council holds a risk management workshop annually in January. Each social Greek organization also has organization-specific educational programming. There is also a student run initiative, Generation Rx, through the College of Pharmacy and Health Sciences' chapter of the American Pharmacists Association-Academy of Student Pharmacists that promotes medication safety through various activities such as drug awareness week and on or off campus programming.

Butler also has multiple awareness campaigns related to substance misuse including "The More You Know," which uses graphics on social media platforms with brief research-based information using the hashtag #TheMoreYouKnowBU, and Good Clean Fun which highlights substance-free activities, and #BUBeWell which shares healthy living messages from each of the BUBeWell's eight holistic wellness areas on social media platforms using the aforementioned hashtag.[115]

The University's Community of C.A.R.E website has multiple ways for one to report issues.[109] There is a form to anonymously report criminal violations to the University police department using Silent Watch. To report a general well-being concern about someone, there is an online form that goes to the Dean of Students. This form is not anonymous and asks for selection of the type(s) of concern. The types of concern listed are academic, medical, mental health issue, and well-being/endangerment. Medical concerns have the definition of "this could include physical ailments that impeded one's ability to function well in an academic setting" and mental health issues has the definition of, "this could include anxiety, depression, inability to concentrate/focus, suicidal ideation, alcohol/drug misuse and addiction." The Community of C.A.R.E. website also provides a telephone number and email address for Student Affairs. It redirects issues of sexual misconduct to those resources on the designated University website. It also describes the Assessment and CARE Team which has members from each college and Student Disability Services, the Learning Resource Center, Student Living and Learning, International Student Services, Counseling and Consultation Services, and the Assistant Dean of Students. It also lists links to education and prevention program resources and confidential campus resources.[109]

One such important link from the Community of C.A.R.E. website is the Health Education and Outreach Programs website.[109,116] Its homepage lists peer education groups such as PAWS (Peers Advocating Wellness for Students) and GEAR (Greek Educators, Advocates and Resources). It has links to the self-assessments and health topic information page also found in the Counseling and Consultation Services webpage, includes health and wellness campaign toolkits, resources, and has listings of campus events promoting health and wellness. Overall, the Health Education and Outreach Programs website links to many of the previously discussed campus resources.[116]

Knowing that stimulant misuse often correlates with academic intentions,[25,29,31,33,34] another valuable resource Butler has is the Learning Resource Center (LRC). It offers academic coaching, academic success workshops, academic courses, tutoring, study tables, and advising resources.[117] It may also become involved when academic dishonesty occurs to try to assist the student to have better academic success.

MISSING RESOURCES AND POLICY GAPS

There are many valuable resources and policies already in place at Butler University to address substance misuse and academic affairs. Within the University Student Handbook and conduct system there is a clear process of how to handle academic or conduct violations. The University holds that illicit actions remain illicit on campus and students can and will be held accountable for their actions both by the University and possibly by other outside agencies.[66] There is a clear academic dishonesty policy. The College of Pharmacy and Health Sciences addresses issues such as student substance use, abuse, and dependency. It also covers the unacceptable behaviors of "misappropriation or illegal possession, use or sale of pharmacologically active ingredients."[92] The PA Student Handbook and the Student Athlete Handbook both address drug testing procedures. There are multiple resources available to help students succeed from counseling to learning resources. There are ways for students, faculty, and others to submit concerns and report illegal acts, both anonymously and not.

All students receive some substance education through their orientation process. The Think About It online course from CampusClarity covers sex in college, partying smart, sexual violence, and healthy relationships.[118] The previous course, MyStudentBody, covered similar topics. Everfi programming, of which CampusClarity is now a part, also offers a specific prescription drug abuse prevention program for the university level.[119] Each of their courses offers student-norming data and interactive learning methods.

Substance use is a known issue on campus, as demonstrated by the corresponding tremendous programming focus on alcohol and to a lesser extent on marijuana and tobacco. There are many reasons drugs are used and misused, and the motives often change according to the substance.[25,26,29,47–49] However, the question first becomes is it truly an *academic* issue?

When students' learning is affected, yes; when the drugs are taken to alter (enhance) academic performance, yes; when it is to get high, relax, lose weight, or some other purpose, perhaps it may not be an academic violation, but within a university that promotes multi-faceted wellness and this action's potential effect on its surrounding environment; then yes.

The current student conduct system classifies misconduct as either "student misconduct" or "sexual misconduct." The judiciary action follows either the Rules of Conduct, Sexual Misconduct Policy, or the Non-Discrimination Policy. The Academic Dishonesty Policy outlines the specific disciplinary routes this type of infraction could undergo. Technically, as written, neither the Student Handbook and other University policies nor the college-specific policies hold the use of substances as an *academic* violation; this falls under general student misconduct or professional misconduct, besides being an illicit action.

Butler University does not have a university wide policy that makes it mandatory to report academic violations. There is no universal honor code or other type of higher standard based upon moral, ethical, or other principles which would by virtue of its ideals make reporting such an infraction compulsory. Within specific programs of the university are professional codes with higher moral standards. Accordingly, the health professional students are already held to a higher conduct standard in the wording of their cheating sanctions as well from the COPHS Handbook's statement, "Attempts at cheating shall be interpreted as cheating having taken place."[92] Similarly, student-athletes must conduct themselves with more decorum as they are representatives of the University and under the scrutiny that accompanies this. Society and the Butler Community entrusts music education majors to be role models who help educate and guide the children they teach and interact with. This leaves all students in the colleges of liberal arts and sciences, business, arts, and communication accountable to a lower standard than their

peers. Are they so incredibly more intelligent, unerring, and ethical than students enrolled in other colleges that no such policies are necessaries?

Within each of the aforementioned handbooks, students must self-disclose violations. In two of the three, there is a self-referral program for substance use. Still, at the university level, no requirement exists for students to self-disclose any type of arrest, misdemeanor, or felony, whether substance-related or not. Furthermore, there is no student substance misuse policy apart from those found in the COPHS and Student-Athlete Handbooks.

There are few resources available at the moment to help students who legitimately use medications—particularly medications associated with a higher risk for misuse such as stimulants, opioids, and anxiolytics. Similarly, faculty and staff who face this mode of academic dishonesty or the effects of substance misuse on a student's performance do not have many resources to turn to, let alone concerned parents or mentors. Finally, across the university, the language of some policies is not prescriber-inclusive. While in the academic world, this is semantics, it is a loophole someone could try to exploit should the situation arise.

Overall, there is not much universal proactive action for non-alcohol, -tobacco, or -cannabis substance misuse at Butler University. There are no policies regarding prescription misuse and its academic implications. Resources for faculty, parents, and students for safe medication use and how to address misuse are nonexistent. If Butler desires to be the "stimulating intellectual community built upon interactive dialogue and inquiry among students, faculty, and staff" as stated in its mission statement, it needs to provide the resources and policies to support this environment.[12]

PROPOSED UNIVERSITY CHANGES AND STUDENT, FACULTY/STAFF, AND PARENT RESOURCES

University-wide Changes and Resources

The simplest change relating to substance misuse on Butler University's campus is the wording in the Housing Guidelines and Student-Athlete Handbook where the term "physician" is used. As previously discussed, the word "physician" is not an all-encompassing word for who may legally write prescriptions. The word "prescriber" would include non-physician prescribers such as Physician Assistants and Advanced Practice Nurses. Unless there is a specific rationale why only a physician is an acceptable healthcare provider from a University standpoint, such as an outside organization's policies that Butler must follow, this change would not alter the intent of the Drugs and Other Controlled Substances or the Medical Exemption Process policies in any way. It would solely remove a linguistic loophole and be more inclusive.

Another simple, but expansive change would be adding the misuse of prescription medications for academic reasons to the definition of cheating in the Academic Integrity Policy. This would set the precedence to consider this motivation of substance misuse an academic conduct violation, not just a student conduct problem. Furthermore, as this is a university policy all students would be held to this new, inclusive definition of cheating.

As Duke states in its Academic Dishonesty Policy's cheating definition, cheating is using something to gain an unfair advantage.[104] Butler states in its mission statement it wants to be an intellectual community with dialogue between its members,[12] indicating it supports the idea of education for not only personal, but collective growth. Unfair advantages in academia, such as cheating, do not better society, but negatively impact the learning environment and trust within it. It is impossible to limit all types of potentially unfair advantage-giving actions and substances.

Just in the category of stimulants are substances such as caffeine, which is found in coffee, tea, chocolate, guarana, and mate.[18] All of these substances can be bought freely, over-the-counter and not even only in pharmaceutical products. How would a university limit caffeine intake when it has a coffee shop on campus? By phrasing the amended Academic Dishonesty Policy cheating definition to include somethings such as "the unauthorized use of prescription medication to enhance academic performance" as seen in Duke's policy, it prevents the quandary of how much caffeine or other non-restricted product is too much and becomes an "unfair advantage" and an academic violation. Furthermore, it proactively provides grounds for action if such a situation occurred while taking steps to ensure the best learning environment.

A more complex, non-definition-based university level change involves holistic student care. Student substance misuse is often a complicated issue, possibly involving medical, academic, and legal involvement. In each facet, privacy is of the utmost concern. With health information, HIPAA (the Health Insurance Portability and Accountability Act of 1996, Public Law 104-191) and its subsequent rules including the Privacy Rule of 2000, Security Rule of 2003, the Enforcement Rule of 2006, and the final Omnibus Rule of 2009 take a primary role in protecting this information.[120] Regarding the academic implications of substance misuse, FERPA (the Family Educational Rights and Privacy Act; 20 U.S.C. 1232g and 34 CFR 99) is the major legislation. This federal law protects students' educational records. An exception is granted for "other school officials, including teachers within the educational institution or local educational agency, who have been determined by such agency or institution to have legitimate educational interests, including the educational interests of the child for whom consent would otherwise be required" (20 U.S.C. 1232g (b)(1)(A)).[121] The question becomes who has legitimate educational interest?

Within the framework of Student Affairs, there is collaboration for student care. Currently, the Dean of Student Affairs acts like a gatekeeper; she, or her designee, receives reports of possible academic and conduct infractions as well as the C.A.R.E reports. In turn she decides who is informed of these situations and what resources may be necessary to assist the student. There is at some level a gathering of minds and resources when such a concern appears. However, due to various legal restrictions or university policies, not all gathered members may be partial to all the information at hand.

Within the mental and behavioral health community, there is the concept of wraparound services in which all the services and needs to support a child, or in this case a student, come together in one place. Within healthcare, there are the ideas of having patient-centered care and team-based care. Patient-centered care focuses on involving patients and their families in medical decision-making to achieve the best outcomes for an individual patient. This concept goes hand-in-hand with team-based care where multiple healthcare providers are collaborating together to accomplish the best care for a patient.[122]

If substance misuse is not solely a legal, academic, or medical issue, an integrated student-care model is needed. Educators and healthcare providers are accustomed to working with the "minimum necessary" information to maintain privacy. Yet, this does not prevent them from seeking assistance from others. A university-wide resource tracking system should be developed for recording if a student has used a particular resource such as the Learning Resource Center, Counseling Services, tutoring, etc., without divulging confidential information. This system should also have a platform for faculty, staff, and administrators across all colleges to note trends that may not require immediate action based upon an individual incident or type of incident (such as a student not attending class), but collectively could warrant concern if a pre-specified

"alert" number was reached. Streamlined communication between campus resources can help identify sooner students who are at risk or are showing signs of an issue, including substance misuse.

The final proposed university-wide remodeling relates to information organization. There are substantive resources and efforts related to sexual misconduct and alcohol established on the University campus with corresponding designated websites. Information about non-alcoholic substance misuse, including prescriptions, however, is dispersed throughout the University's website, particularly within the health services and counseling services webpages. Another webpage should be created to place all this information in one area. The website would have multiple audiences with information for students, faculty/staff, and parents. It would bring together reporting avenues, policies, resources, and health information. An example homepage for the proposed website is provided as Figure 12, based upon the University's currently existing Sexual Misconduct page. It includes reporting options, contact information, non-reporting resources, and four main options of where to continue to explore: student resources, parent resources, faculty and staff resources, and information on reporting a concern.

The following sections include the information and resources for the proposed non-alcohol substance misuse website by audience.

Resources for Students

For students, the site would provide information for both those who legitimately need a higher risk medication and face the pressures of misuse and for those who have explored or do misuse substances. Due to the restrictions on college athletes, these students would be directed to the Butler Athletics website and its resources. The information on the non-alcoholic substance misuse website would include "fast facts"—brief, attention grabbing statistics— using

infographics that could also be used in a social media campaign similar to "The More You Know" campaign previously run by Butler's Health Education and Outreach Program Office. Data for these items could come from both the ICSUS reports and incoming student demographics gathered from Think About It among other sources such as the Monitoring the Future survey. Refer to sample infographics provided in Appendix D. As seen in the 2018 Butler University ICSUS data, the primary way students are safeguarding their medications is by refusing to share them (49.2%); only 3.2% use a lockbox as their primary strategy, and 34.9% have no strategy.[65] Therefore, providing safe storage tips and refusal strategies can help students safeguard their medications. Example infographics are provided in Appendix E. This information could also be easily converted into text-based webpage content in a list or paragraph format.

The 2018 Butler University ICSUS survey also indicated that very few students use safe disposal methods (1 respondent, 0.8% of prescription holders) as their primary way to safeguard their medications.[65] However, 7.1% (9 respondents) indicated they intentionally do not bring extra medication to campus.[65] At the present time there is no general resource guide about drug-disposal locations, programs, and strategies. In hopes of helping provide a safeguarding strategy for the 34.9% of prescription-holding students without one,[65] creating resources to inform safe medication disposal could help remove any temptation for misuse with unused or excess medication. Again, such information could be placed on the student-focused webpage and distributed in other mechanisms such as infographics (refer to the Appendix E examples).

Knowing that stimulants are often used for academic motivations,[25,26,29,32,47–49] the website would provide a link to the Learning Resource Center to help students find better, more effective ways to accomplish their academic goals. Other substances, such as opioids and anxiolytics, are used for non-academic motivations such as emotional or physical pain[47,48,54] or anxiety.[26,49] The

literature shows many possible factors that influence substance use. From a health and especially psychological standpoint, there is much that campus-based wellness resources can do. Part of this is simply being aware of potential risk factors and raising awareness. Some factors are harder to gauge or act upon such as executive functioning. Even so, as Munro and Wilens found, the executive functioning of a student may impact their actions, especially stimulant usage.[34,35] Geisner found a correlation of stimulant use with an increased likelihood of problematic gambling.[36] Although not discussed in this work, through the Indiana Collegiate Substance Use Survey (ICSUS) Butler has some information on campus and statewide gambling habits. Available campus resources—if they exist—are not listed within University webpages.

While Benson concluded that depression is not a true correlate for stimulant misuse, only the ADHD symptoms overlap with depression,[37] Morioka determined that depression and affective dysregulation may be linked to analgesic misuse.[51] Papp highlighted the complexities that being in a dating relationships can have on drug use.[39] Konstenius dug deeper into the effects of childhood trauma exposures, offering the information that emotional or sexual trauma may related to ADHD in childhood.[40] Alamir showed that the misuse of stimulants and painkillers and possibly of sedatives, correlate with sleep concerns.[53] Gallucci demonstrated the possible benefit of religiosity on preventing stimulant misuse.[38] Knowing that executive functioning, affective dysregulation, depression, relationships, childhood trauma, gambling, and sleep issues may relate to drug misuse in one way or another, providing resources specific to these issues would be prudent.

For many of these potential correlations to misuse, counseling or a health evaluation could spot concerns. A link to health services and counseling services would be provided on the proposed website to help facilitate healthier solutions. Encouraging students to utilize resources

such as the Let's Talk drop-in service is vital. It would be equally important on this page for students to have access to reporting options if they were concerned about themselves or a peer and the Community of C.A.R.E. reporting methods would be accessible as well as the information for reporting criminal acts.

As emphasized in Butler's Rules of Conduct and other locations, the use of prescription medications without a prescription is illegal. Emphasizing this to students is important not only so that they are aware of the university, state, and federal consequences of misuse but because as Cutler and Kremer discovered many students may not have had this kind of conversation before.[48] Therefore, within the student page both the legal and University policies would be housed again, or at least electronically link to the relevant Student Handbook and Policy webpages. Similar to the University's existing "Let Us Be Clear" messaging to students regarding alcohol and marijuana use, materials aimed at promoting awareness of policies and laws regarding (prescription) drug use could be created. Appendix F provides sample infographics.

Another step to a collective student non-alcohol substance webpage is to move or edit the current format and/or listed resources currently housed under the Health Education and Outreach Programs' Self-Assessment & Online Health Topic Information page. This webpage has a collection of self-screening tools available for alcohol and marijuana, unfortunately, it appears there is not a free patient-friendly resource available yet for substance misuse. Most of the existing screenings are aimed at having a patient take the survey in the presence of and at an appointment with a healthcare provider so that the results can be interpreted, and decisions can be made for next steps. To fill the need of a non-appointment-based screen, the Higher Education Center for Alcohol and Drug Misuse Prevention and Recovery at The Ohio State University has

a program called ScreenU. It is an anonymous, brief screen that identifies students along the continuum of use from misuse to dependency.[123] It has separate screening options for alcohol, marijuana, and prescription drugs which provide positive feedback for non-misusers or risk-level specific feedback for misusers. The program is somewhat customizable and provides the subscribing university with data. It would be prudent to either invest in this type of screening, as the University already has for alcohol (360 Proof) and marijuana (Marijuana e-CHECKUP TO GO), or to continue to monitor for a free screening tool that is user-friendly and does not require a health care provider's interpretation.

Resources for Faculty and Staff

For faculty and staff, the issue of student substance misuse in the context of academia is gray. It is often challenging to know if a student is misusing a substance unless they discuss it, or the evidence presents itself another way. The COPHS Handbook in its Substance Use, Abuse or Dependency Policy provides the following examples of when a student may be struggling with substance misuse, which should be provided on the proposed website:

- Precipitous deterioration and academic performance
- Frequent and/or regular absences from class or rotations
- Physical symptoms such as dilated or constricted pupils, incoherent rambling or slurred speech, tremors, unsteady gait, recurring nausea and vomiting, aggressive or belligerent behavior, precipitous weight loss, or smell of alcohol or marijuana on a person
- Corroborated or credible incredible written report(s) from faculty, staff, students, University residential life, or law enforcement or regulatory agencies regarding suspected substance use, abuse, or dependency by a student.[92]

The webpage would again provide the Community of C.A.R.E. reporting methods. Additionally, a discussion about which faculty and staff are Campus Security Authorities under the Clery Act would be included or linked into this page, with applicable reporting information.

Direct referrals for the Butler Learning Resource Center (LRC), Health Services, and Counseling and Consultation Services (CCS) should be developed so that concerns can go directly to the service best suited to address them. Currently, there is no formal way for a faculty member to have the LRC reach out to or work with students, only the capability to advise students of the LRC's resources. Similarly, presently there is no direct way for faculty and staff to consult with CCS if a situation arises and they would like to address the situation themselves; a concern must be submitted to Student Affairs. This approach is not impossible; Duke University's Counseling and Psychological Services offers consultation to faculty, advisors, and administration about student concerns.[124] A direct report to Health Services or CCS may not be possible due to privacy legislation or campus policies, however, it is reasonable that such an action would fall under the permitted use of patient health information for treatment under HIPAA or less so, under the legitimate educational use exception of FERPA. Treatment in this case includes consultation and referral from one provider to another,[125] which here would be a faculty member to these services. Although, if faculty and staff are "providers" they would need HIPAA training.

With the adoption of an amended Academic Integrity Policy defining prescription misuse as an academic violation and the creation of a collaborative reporting system, it will be important for faculty and staff members to utilize it. Only with their participation, will it be a helpful tool. The Duke University student conduct website for faculty and instructors specifically addresses the importance of reporting every possible academic dishonesty instance. Its reasoning includes: ensuring consistency, to protect faculty, to verify that students do not have prior incidents, to identify resources, and to gauge campus climate.[126] It is important for Butler to be able to quantitatively look at the amount, types, and sources of issues facing its students.

Other universities have developed resources specific for faculty to help with conduct issues. For example, beyond their delineation of unauthorized use of prescription medication as cheating, therefore an academic violation, Duke has an optional one-time academic dishonesty process for minor offenses.[104] It is provided as Appendix C for reference. Faculty-specific webpages such as those at Duke University and the University of Delaware (where one of the authors of *Academic Doping: Institutional Policies Regarding Nonmedical use of Prescription Stimulants in U.S. Higher Education* was affiliated) offer specific proactive advice such as "Let students know the extent to which collaboration is permitted and the degree to which resources may be used in completing assignments"[126] or emphasize being specific, providing realistic examples and parameters, and having clear explanations of consequences if they are not followed.[126,127] The University of Delaware also uses a document with referral guidelines for academic honesty violations. It outlines specific criteria based upon timing in the semester, type of assignment, and other factors to determine the severity of the infraction.[128] It then goes on to suggest penalties for the faculty use, possible sanctions by their conduct committee, and sanction from the administration. Within the University of Delaware's student conduct system students may be fined for their actions and parental notification is possible. This document is provided as Appendix G. Guidance documents and resources like those highlighted from Duke University and the University of Delaware could be created for Butler University.

The Coalition to Prevent ADHD Medication Misuse (CPAMM) has developed resources specifically aimed at college administrators regarding medication misuse. Their website (www.cpamm.org) includes research, infographics, and other such resources that could be accessed from this proposed webpage. For example, they have a toolkit to create university-specific posters and social media posts promoting a "Students Stick Together" campaign for

social norming against stimulant use.[129] Another organization, NASPA (officially, NASPA-Student Affairs Administrators in Higher Education, formerly the National Association of Student Personnel Administrators), has an Alcohol and Other Drug Knowledge Community (AOD-KC) of professionals and the BACCHUS Initiatives which promote peer education on health and safety issues. The NASPA AOD-KC website has resources, research, and other items such as toolkits and webinars available, although some content is restricted to members only. While not faculty-, staff-, or administration-specific, it includes a collection of Red Ribbon Week posters that address alcohol, medications, and cannabis use.[130] A selection of these posters is available in Appendix H. NASPA references and provides links to CPAMM and the Jed Foundation.

Another useful feature of the faculty/staff page would be providing a sample syllabus statement that could be used in addition to the Academic Integrity Policy from the Student Handbook. For example, it could recommend adding the COPHS addendum to the cheating policy: "Attempts at cheating shall be interpreted as cheating having taken place."[92] It could also suggest adding Duke's statement, "the unauthorized use of prescription medication to enhance academic performance"[104] to the definition of cheating or a modified version such as the unauthorized use [or attempted use] of prescription medication to enhance academic performance will also be viewed as an academic violation.

Many faculty members already have additional addendums and policies in their syllabi regarding academic integrity and cheating. It is possible that compiling a bank of these statements and strategies could be useful. It could be housed on the proposed website or in another more restricted location. Examples of strategies include an online quiz about academic integrity, requiring signed affirmation statements on each assignment or examination declaring

that no cheating was witnessed or that the work was completed entirely by the student alone. Duke's faculty page also suggests thanking students for their honesty when exams are being passed out and requiring electronic devices to be in bags away from students.[126] Again, this website would link to the existing policies and procedures related to the topic.

Resources for Parents/Guardians

Parents are another group who may be impacted by their student's misuse or academic infractions. Within the University Student Conduct webpage an existing portion for Parent FAQs discusses FERPA and has a "Tips for Parents" section that discusses the conduct system. However, neither of these resources nor those provided by health services address how to approach substance misuse or other concerns. As mentioned in Cutler and Kremer's study, students felt that their parents condoned their medication misuse by not addressing it, providing leftover medications, or allowing easy access to prescriptions.[48] With this in mind, the same resources targeted at students on safe disposal and medication storage should be provided on the parent webpage. CPAMM also offers resources specifically directed at parents. Appendices I and J provide their Parent Conversation Guides for students with and without ADHD.

The Partnership for Drug-Free Kids website, drugfree.org, is an excellent resource particularly for parents of teenagers and young adults.[131] Its resources include information on how to look for warning signs, how to talk with their child about substance use, how to take action if there is suspicion of use, setting limits and monitoring, how to use positive reinforcement, and much more. The website has specific conversation tips about discussing drug use, e-booklets on interventions, and sample contracts between a parent and child. It also has access to one-on-one help via phone, text, or email from specialists as well as rehabilitation information, support groups and parent forums. More specific to medications, the website also

has talking tips with scenarios for parents of toddlers to college students. It has a page devoted specifically to addressing medication misuse with a talking guide for parents and a safe disposal booklet. The website also has information for grandparents and their importance in preventing or addressing misuse. Many more resources can be found in its Parent Resource Library. The proposed substance misuse website would at the minimum include links to The Partnership for Drug-Free Kids resources and website.[131]

Summary

At the university level, adapting prescriber-inclusive language, expanding the cheating definition within the Academic Integrity Policy, creating a resource tracking and collaborative reporting system, including direct referrals to the LRC and CCS will immensely alter Butler University's preparedness and responsiveness on prescription and other substance misuse. The compilation of these changes in the University would be evident on a non-alcohol substance misuse website with target areas for reporting misuse concerns and resources and information for students, faculty/staff, and parents. The majority of proposed resources and other alterations focus on students. These include fast-facts with social norming and statistical information on substance misuse, self-assessment, storage tips, refusal strategies, safe disposal information, and direction to campus resources, particularly the LRC and CCS. There would also be an emphasis on University and legal consequences. For faculty/staff members, their page would focus on addressing student prescription misuse. Resources would include a symptom list, reporting information, decision making guides, tips for classroom policies and syllabi development, and a collection of existing techniques. Finally, parents would have conversation guides provided to help promote dialogue between them and their student, along with storage and disposal tips.

Each of these webpages would include information on Community of C.A.R.E. reporting for concerns about a student.

CONCLUSION

Substance misuse, particularly prescription drug misuse, is a complex issue. It has many possible motivations and correlations. It has implications for mental wellbeing and physical health, as well as ramifications in academia and the legal system. As demonstrated in the established University rules, polices, and procedures it is not common to proactively address prescription misuse as an academic issue. Correspondingly, the resources in this area are not as developed as in other substance areas such as alcohol.

College has many pressures and influences. Grades and points remain the highest importance in the classroom. Students face new and varying social settings. Institutions attempt to provide the best experiences to their students both inside and outside of the classroom. Education is vital in all areas, which has provided holistic wellness models on campuses. However, consequences accompany these ideas. Institutions of higher education have policies, procedures, handbooks, and codes to ensure the best experience for all. In addition, students remain under any legal requirements of the city, county, state, or country. Campuses make many efforts to promote awareness of these regulations and the possible sanctions that may ensue if they are broken.

While holding students to a standard is admirable, unless they understand, are aware of, and internalize the standard, it is near meaningless. Teaching academic integrity is challenging because it cannot be evaluated by an exam or by checking a box; it is ethics and morality at play in an academic setting. Getting student investment in the idea of academic honesty extending to all aspects of their studies including refraining from using prescriptions to enhance themselves academically takes dedication and reinforcement. Similarly, conveying the importance of drug safety and for it to be understood is challenging.

Butler University already has many structures in place to help its students. Still, there is much that can be done to further safe prescription and substance use on campus. The University already has at its disposal campus-specific data that it can use to implement changes and to develop resources. Integrating information into one website, creating specific resources for students, faculty, and parents within the Butler community, and developing a more integrated student care system to identify potential concerns would help it progress towards achieving community-wide safe prescription use.

This issue is not at the forefront of campus protests demanding change nor a concern that keeps university presidents or college deans up at night. Even so, knowing that for the first time in recent surveying Butler's rates of misuse exceeded the state average; knowing that substance misuse amongst college students is not infrequent; knowing that academics are one of the primary motivations for misuse of stimulants; knowing that the primary focus is bettering the learning environment and student wellness; and realizing it can be as simple as providing more resources and changing a few policies, it is the direction that Butler needs to take. The impact of such changes would be a new direction for the University's approach to substance misuse. If Butler wishes to be proactive and not just reactive in its approach to prescription substance misuse, it will act.

Tables

Table 1. Outside Factors and Stimulants Use

Study	Purpose	Design	Participants	Misusers (%)	Timeframe of misuse	Source of drug	Reason	Findings	Odds Ratio (95% CI)	P-value
Ross	Benefit to risk tradeoffs of NMUPS	Campus survey of 6 public colleges	259	100	Past year	Free from friend, purchased from friend or family	95% academics, 41% partying, 18% weight loss, 10% athletics	Top motives: better grades, deadlines, getting expelled, career limitations, Least important motives: partying, skipping meals, friends' approval of NMUPS	-	-
Gallucci	Religious coping and NMUPS	Campus survey of 3 colleges	908	17.4	Past year	-	-	Males ↑ vs. females	1.51 (1.013-2.239)	<0.05
								Rx holders ↑ vs. non-Rx holders	4.321 (2.569-7.268)	<0.001
								↑ organized religious activities attendance ↓ NMUPS	0.679 (0.584-0.79)	<0.001
								↑ positive religious coping ↓ NMUPS	0.932 (0.904-0.961)	<0.001
Geisner	Gambling and NMUPS	Campus survey with a screening sample, then longitudinal follow up 12 months later	4640; 199 longitudinal; 159 at end	8.3% screening sample	Past 3 months	-	-	Adjusted screening sample NMUPS ↑ gambling problems vs. no NMUPS	1.75 (1.17-2.61)	0.007
								Screening sample NMUPS ↑ gambling problems vs. no NMUPS	3.16 (2.20-4.52)	<0.001
				21.2% longitudinal sample				Longitudinal sample baseline NMUPS ↑ gambling frequency	1.75 (0.05-3.44)	0.043
Le	OTC misuse	Campus survey	939	RX: 21.4 OTC: 11.4	Lifetime	-	-	OTC stimulant misuse ↑ NMUPS	7.23 (3.08-17.0)	<0.001
Allen	Drug use given opportunity	College Life Study, 2005-2012	1253	-	Past Year	-	-	55.6% used stimulants if given the opportunity	-	-
Alamir	NMUPD and sleep quality	NACHA-NCHA, 2010-2011	133211	4.1	Past Year	-	-	NMUPS ↓ enough sleep	0.93 (0.89-0.97)	<0.01
								NMUPS ↑ early awakening	1.10 (1.05-1.16)	<0.0001
								NMUPS ↑ days with daytime sleepiness	1.13 (1.08-1.18)	<0.0001
								NMUPS ↑ difficulty falling asleep	1.10 (1.05-1.15)	<0.0001

NMUPS= nonmedical use of prescription stimulants; OTC= over-the-counter drugs; RX; prescription drugs; NACHA-NCHA= National American College Health Association-National College Health Assessment; NMUPD= nonmedical use of prescription drugs

Table 2. Psychological Factors and Stimulants							
Study	**Purpose**	**Design**	**# of Subjects**	**Misusers (%)**	**Timeframe of misuse**	**Findings**	**P-value**
Wilens	Neuropsychological functioning	Controlled, extensive survey	298 (100 misusers, 198 non-misusers)	33.6%	Lifetime	Misusers ↑ GECs vs. nonusers	0.02
						Misusers ↑ MI dysfunction vs. nonusers	0.02
						Misusers ↑ BRI vs. nonusers	0.03
Donaldson	Vested (best) interest and NMUPS intentions	Amazon MTurk responses	162 total	34%	Lifetime	Moderately to strongly-vested (best self-interest) to NMUPS significant for intentions to NMUPS	<0.001
			19-29 yo: 129	32.6%		Weakly-vested not significant for NMUPS	0.90
Benson	Depression and ADHD	Campus survey	890	23	Past year	For each additional ADHD symptom NMUPS ↑ 1.110 times (95% CI 1.067-1.156) with depression diagnosis covariate	0.000
						For each additional ADHD symptom NMUPS ↑ 1.118 times (95% CI 1.070-1.168) with continuous depression score covariate	0.000
						Overlapping depression measures and ADHD symptoms: trouble concentrating, fidgeting, and an inability to focus on what one is doing	<0.001
						Depression not true correlate with NMUPS with depression diagnosis covariate	0.723
						Depression not true correlate with NMUPS with continuous depression score covariate	0.417
GEC= global executive composite, comprised of BRI and MI together; BRI= behavioral recognition index; MI= metacognition index; NMUPS=nonmedical use of prescription stimulants							

Table 3. Influence of Stimulants and Academic/GPA effects

Study	Purpose	Design	Participants	Misusers (%)	Timeframe of misuse	Source of drug	Reason	Other	Adjusted Odds Ratio (95% CI)	P-value
Bavarian	Influences	Campus survey	520	25.6	Past semester	87.1% friends, 30.4 acquaintances, 26.4% self	78.2% focus, 77.1% concentration, stay awake 58.6% studying more enjoyable 58%	67.7% experienced outcome desired	-	-
								"B" student ↑ to NMUPS vs. "A"	3.26 (1.15-9.26)	<0.05
								"C" student ↑ to NMUPS vs. "A"	8.65 (2.35-31.90)	<0.01
Arria	Perceived benefit of NMUPS to improve grades	Survey of 9 colleges; excluded ADHD diagnosis	6962	11.2	Past 6 months	-	28.6% believed earn higher grades 38% neutral	Stronger belief in academic benefit ↑ misuse	2.17 (1.99-2.37)	<0.001
								Each stepwise ↑ in confidence from "unsure" to "highly agree" significant ↑ in NMUPS-		-
Arria	University reported grades and NMUPS status	College Life Study data; Years 2 and 3; excluded ADHD diagnosis	898	31.2 total Persisters: 16.7 Initiators: 8.7 Desisters: 5.8	Past year	-	-	No significant GPA changes overall (mean 0.0048, 95% CI -0.0333-0.0428)		>0.081
								Persisters mean GPA change 0.0048 not significant (95% CI -0.0868-0.0373)		-
								Initiators mean GPA change -0.0249 not significant (95% CI -0.1107-0.0609)		-
								Desisters mean GPA change +0.0157 not significant (95% CI -0.0893-0.1207)		-
								Abstainers mean GPA change +0.0529 (95% CI 0.0223-0.0836)		-
Munro	Executive functioning	Campus survey	308	18.8	Lifetime	-	25% Perform better on schoolwork; 22.1% focus better in class; 20.5% perform better on tests	35.4% had clinically significant EF dysfunction scores		-
								No difference in NMUPS between genders		0.401
								↑ misuse with EF deficits vs. not		<0.001
								↓ GPA with EF deficiency vs. not		0.007
								No significant GPA difference for NMUPS vs. not		0.890
								No significant GPA difference with NMUPS and EF deficiency vs. not		0.660

EF= executive functioning; NMUPS= nonmedical use of prescription stimulants

Table 4. Social/Friend Influences on Stimulant Use										
Study	**Purpose**	**Design**	**# of Subjects**	**Misusers (%)**	**Timeframe of misuse**	**Gender**	**Reason for Misuse**	**Findings**	**Odds Ratio**	**P-value**
Watkins	Social learning, association, and reinforcement	Campus survey	841	12.4	Past semester	-	-	Friend NMUPD ↑ NMUPD	2.102	<0.001
								Friend NMUPD ↑ NMUPS	2.402	<0.001
								Time with friends ↑ NMUPD	1.186	<0.05
								Time with friends ↑ NMUPS	1.283	<0.05
								Positive perceived experiences ↑ NMUPD	1.786	<0.001
								Positive perceived experiences ↑ NMUPS	1.952	<0.001
Watkins	Reasons for drug use	Campus survey	841	12.4	Past semester	Instrumental users ↑ 1.822 times if female (p<0.01)	4.3% recreation, 77.3% instrumental, 18.4% mixed motives	Instrumental users' friend NMUPD use ↑ vs. nonusers	1.841	<0.001
								Mixed/recreational users' friend NMUPD use ↑ vs. nonusers	2.850	<0.001
								Instrumental users positively view NMUPD ↑ NMUPD	1.780	<0.001
								Mixed/recreational users positively view NMUPD ↑ NMUPD vs. nonusers	2.326	<0.001
Schultz	Prescription holders'	Exploratory campus survey	959; 121 prescription holders	43.8% diverted prescription	Lifetime	-	-	Diverters believed friends approved of NMUPS 1-2 times or occasionally vs. non-diverters	-	<0.05
								Diverters believed friends less in favor of never NMUPS vs. non-diverters	-	<0.001
								Diverters approved of NMUPS for focus, studying, staying awake to study, productivity, alertness vs. non-diverters	-	<0.001
								Diverters believed friends approved of NMUPS for focus, studying, staying awake to study, productivity, alertness vs. non-diverters		<0.001
								Diverters believed parents approved of NMUPS for focus, studying, and productivity vs. non-diverters		<0.01
								Diverters believed a typical student approved of NMUPS for focus, studying, staying awake to study, productivity, alertness vs. non-diverters		<0.05
NMUPD= nonmedical use of prescription drugs, NMUPS= nonmedical use of prescription stimulants										

Table 5. Opioids/Analgesics/Painkillers								
Study	**Study Purpose**	**Data source/ design**	**Participants**	**Misusers (%)**	**Timeframe of misuse**	**Findings**	**Odds Ratio (95% CI)**	**P-value**
Martins	NMUPO and heroin use	NSDUH, 2002-2014	Age 18-25 group; # unspecified	2002-2014 Significant ↓ 11.43 to 7.59 ($p<0.05$)	Past Year	↑ OUD from 2002-2014	1.37 (1.03-1.81)	<0.05
						Heroin use ↑ from 2002-2014	4.18 (2.59-6.73)	<0.05
Votaw	Perceived risk of heroin	NSDUH, 2002-2013	49045	-	Past Year	Female and older age ↑ perceived riskiness of heroin vs. males and younger persons	-	-
						Heroin use ↓ perceived risk of using heroin 1-2 times	0.38 (0.33-0.44)	<0.001
						Heroin use ↓ perceived risk of using regularly	0.39 (0.32-0.48)	<0.001
						OUD no significant effect on trying heroin	1.01 (0.90-1.12)	0.91
Jones	Opioid misuse trends	NSDUH, 2003-2014	≥12 yo; # unspecified	↓ 48.4 to 13.3	Past Year	↑ NMUPO if used Rx sedatives/tranquilizers	46.02 (28.6-74)	<0.001
						↑ NMUPO if used Rx stimulants	18.91 (8.18-43.72)	<0.001
						↑ NMUPO if used heroin	28.74 (18.90-43.70)	<0.001
Allen	Drug use given opportunity	College Life Study, 2005-2012	1253	-	Past Year	52.5% used analgesics if given the opportunity	-	-
Alamir	NMUPD and sleep quality	NACHA-NCHA, 2010-2011	133211	7.5	Past Year	NMUPA ↓ getting enough sleep	0.84 (0.80-0.88)	<0.0001
						NMUPA ↑ early awakening	1.28 (1.22-1.34)	
						NMUPA ↑ days with daytime sleepiness	1.16 (1.11-1.22)	
						NMUPA ↑ difficulty falling asleep	1.27 (1.21-1.33)	
Ford	Varsity athletes, NMUPO, and injury	NACHA-NCHA, 2008-2011	320412	8.3	Past Year	Injured, male athletes most likely to NMUPO vs. injured or non-injured non-athletes or female athletes	-	< 0.001

NMUPO= nonmedical use of prescription opioids; NSDUH= National Survey on Drug Use and Health; NMUPD= nonmedical use of prescription drugs; OUD= opioid use disorder; NMUPA= nonmedical use of prescription analgesics; NACHA-NCHA= National American College Health Association-National College Health Assessment; Rx=prescription

Table 6. Reasoning/psychological factors and Opioids/Analgesics/Painkillers									
Study	**Study Purpose**	**Data source/ design**	**Participants**	**Misusers (%)**	**Timeframe of misuse**	**Reasons for Misuse**	**Findings**	**Odds Ratio**	**P-value**
Morioka	Affective dysregulation, conduct problems, depressive symptoms, and psychological distress and NMUPA	College Life Study, Years 1 and 3	929	9.4	Lifetime/ past year	-	Males ↑ NMUPA vs. females	1.80 (1.23-2.63)	0.003
							Affective dysregulation ↑ NMUPA vs. no drug use	1.05 (1.03-1.07)	<0.000
							Conduct problems ↑ NMUPA vs. no drug use	1.10 (1.03-1.16)	0.003
							Depressive symptoms ↑ NMUPA vs. no drug use	1.07 (1.03-1.12)	0.002
							Psychological distress ↑ NMUPA vs. no drug use	1.07 (1.01-1.13)	0.0015
							DI-A ↑ NMUPA vs. no drug use	1.05 (1.02-1.07	<0.001
							DI-A ↑ NMUPA vs. Rx misuse without NMUPA use		
							CECPI ↑ NMUPA vs. none	1.07 (1.01-1.13)	0.020
							Drug use without NMUPA use vs. none	1.06 (1.02-1.10)	0.003
Watkins	Social learning, association, and reinforcement	Campus survey	841	12.4	Past semester	-	Positive perceived experiences ↑ NMUPA	1.951	<0.001
Parks	Motives, consequences, Rx classes of NMUPD	Semi-structured group discussions	61	100	Past 3 months	Warm and cozy feeling, pain	Students wary of opioid addiction		
							Friends and peers main drug source, perception that it is easy to get Rx from campus health center, or physician		
Cutler	Opportunities, motives, justifications for NMUPO	Semi-structured interviews	76	100	Past Year	Pain, relaxation, to get drunk quicker	Parental "condoning" of NMUPD due to easy Rx access, having Rx "leftovers," and lack of conversation		
							Perception that opioids are easy to get		
Kenne	Prevalence harmfulness, reasons, medical/ emotional health treatment not sought	Campus survey	668	3.7 (9.5% lifetime)	Past Year	Physical pain (8.1%): Temporary; needed immediate relief Emotional pain (2.2%): did not want others to find out; too embarrassed to get help	Regular NMUPO considered dangerous		
							Morphine considered the most dangerous drug		
							Vicodin considered least dangerous drug		

NMUPD= nonmedical use of prescription drugs; NMUPA= nonmedical use of prescription analgesics; Rx=prescription; DI-A=Dysregulation Index-affective scale (affective dysregulation indicator); CECPI=College Early Conduct Problems Index (conduct problems indicator)

Table 7. Sedatives and Anxiolytics								
Study	**Purpose**	**Design**	**Participants**	**Misusers (%)**	**Timeframe of misuse**	**Findings**	**Odds Ratio (95% CI)**	**P-value**
McCabe	Trend the course of NMUPD from adolescence to adulthood	MTF data, 1976-2015	~72000; total cohort unspecified	100	Baseline, biennial thereafter	Males had faster rates of decline of NMUPD	-	-
						Hispanic, white, black had similar rates of decline		
						Asian slower rate of decline vs. white		
						Binge drinking, cigarettes, marijuana slower rates of decline		
McCabe	Interaction of medical and NMUPSA	MTF data, 1977-2014	8373	12.5	Baseline (18 yo) then biennially on past-year use until 35 yo	Medical sedative/anxiolytic use only at 18 not significant vs. no use	-	-
						Medical /nonmedical sedative/anxiolytic use at 18 ↑ CUD	1.73 (1.18-2.54)	<0.01
						Medical /nonmedical sedative/anxiolytic use at 18 ↑ ODUD	2.97 (1.88-4.69)	<0.001
						NMUPSA at 18 ↑ ODUD	3.01 (1.92-4.71)	<0.001
						NMUPSA at 18 ↑ CUD	2.41 (1.64-3.54)	<0.001
Alamir	NMUPD and sleep quality	NACHA-NCHA data, 2010-2011	133211	7.4	Past year	Female ↑ issues with early awakening	1.14 (1.05-1.24)	<0.001
						Female ↑ difficulty falling asleep	1.18 (1.09-1.27)	<0.0001
Allen	drug use given opportunity	College Life Study, 2005-2012	1253	-	Past Year	57.7% used tranquilizers if given the opportunity	-	-
Le	OTC misuse	Campus survey	939	RX: 21.4 OTC: 11.4	Lifetime	OTC sleep aid misuse ↑ prescription depressant (sedatives, sleep aids, tranquilizers) misuse	7.15 (3.31-15.5)	<0.001
Watkins	Social learning, association, and reinforcement	Campus survey	841	12.4	Past semester	Friend NMUPD ↑ tranquilizer, anti-depressant, sleeping medications misuse	1.919	<0.001
						Positive perceived experiences ↑ tranquilizer, anti-depressant, sleeping medications misuse	1.551	<0.05

MTF= Monitoring the Future Survey; NMUPD= nonmedical use of prescription drugs, NMUPSA= nonmedical use of prescription sedatives/anxiolytics; CUD= cannabis use disorder; ODUD= other drug use disorder (non-cannabis, non-alcoholic); NACHA-NCHA= National American College Health Association-National College Health Assessment; OTC= over-the-counter drugs

Table 8. Fraternity/Sorority Membership

Study	Purpose	Design	Participants	Misusers (%)	Timeframe of misuse	Findings	Odds Ratio (95% CI)	P-value
Watkins	Social learning, association, and reinforcement	Campus survey	841	24.4	Past semester	Greek ↑ NMUPD vs. unaffiliated	2.219	<0.01
						Greek ↑ NMUPS vs. unaffiliated	2.680	<0.01
						Greek ↑ tranquilizers, antidepressants, sleep medications misuse vs. unaffiliated	1.919	<0.001
Watkins	Reasons for drug use	Campus survey	841	12.4	Past semester	Instrumental users ↑ Greek affiliated vs. nonusers	2.127	<0.05
Bavarian	Influences	Campus survey	520	25.6	Past semester	Greek affiliation not significant	0.75 (0.32-1.77)	-
Gallucci	Religious coping and NMUPS	Campus survey of 3 sites	908	17.4	Past year	Greek affiliation ↑ NMUPS vs. unaffiliated	2.498 (1.695-3.682)	<0.001

NMUPD= nonmedical use of prescription drugs, NMUPS= nonmedical use of prescription stimulants

Table 9. Varsity Athletes

Study	Purpose	Data/Design	Participants	Misusers (%)	Timeframe of misuse	Findings	Adjusted Odds Ratio (95% CI)	P-value
Bavarian	Influences on NMUPS	Campus survey	520	25.6	Past semester	Athletes ↑ NMUPS	2.82 (1.25-6.39)	<0.05
Ford	Varsity athletes, NMUPO, and injury	NACHA-NCHA data, 2008-2011	320412	8.3	Past year	Varsity athlete ↑ vs. non-athlete	1.261 (1.194-1.331)	<0.001
						Injured athlete ↑ vs. non-injured athlete	0.527 (0.479-0.580)	
						Athlete ↑ vs. injured non-athlete	0.786 (0.721-0.857)	
						Athlete ↑ vs. injured female athlete	0.672 (0.576-0.785)	
						Male athlete ↑ vs. female athlete	0.753 (0.684-0.828)	
						Male athlete ↑ vs. non-athlete male	0.696 (0.644-0.752)	
						Male athlete ↑ vs. non-athlete female	0.668 (0.618-0.722)	

NMUPS= nonmedical use of prescription stimulants; NMUPO= nonmedical use of prescription opioids; NACHA-NCHA= National American College Health Association-National College Health Assessment

Table 10. Indiana 2012-2018 Responses and Usability								
	Number of Schools	**Private**	**Public**	**Participants Invited**	**Response Rates (%)**	**Excluded (%)**	**Age Exclusions (%)**	**Usable (%)**
2012	9	6	3	47739	7837 (16.4)	869 (11.1)	-	6968 (88.9)
2013	11	5	6	52374	6660 (12.7)	548 (8.2)	-	6112 (91.8)
2014*	12	5	7	49120	5139 (10.5)	428 (8.3)	-	4711 (91.6)
2015	8	3	3	25364	1850 (7.3)	161 (8.7)	-	1689 (91.3)
2016	20	10	10	67848	10182 (15)	284 (2.8)	-	9898 (97.2)
2017**	31	7	24	67348	7227 (10.7)	191 (2.6)	2222 (30.7)	4814 (66.6)
2018***	24	12	12	85566	9640 (11.3)	67 (7)	1215 (12.6)	8358 (86.7)

* At one institution only 0.3% of invited participants responded, excluding this school the response rate is 14.3%
** In 2017, excluding age-ineligible responses 96.2% of surveys were usable
*** In 2018, excluding age-ineligible responses 99.2% of surveys were usable

Table 11. Indiana 2012-2015 Past-Year Nonmedical Drug Use by Year and Type			
	Prescription Medicine Not Prescribed to Respondent (%)	**Own Prescription Misused (%)**	**OTC Medication Misused (%)**
2012	12.8	3.5	2.1
2013	12.7	3.1	1.5
2014	11.2	3	1.4
2015	9.8	2.6	1.8

Table 12. Indiana 2012-2015 Past-Year Misuse by Gender				
	2012	**2013**	**2014**	**2015**
Prescription Misuse				
Male (%)	15.8***	16.4***	13.5***	10.8
Female (%)	11.1	10.6	9.8	9.2
Misuse to get High				
Male (%)	4.9***	4.3***	3.8*	3.8*
Female (%)	2.7	2.5	2.5	1.9
OTC Misuse				
Male (%)	3.1***	2.8***	1.9*	2.1
Female (%)	1.4	0.8	1.1	1.7
* $p<0.05$; ** $p<0.01$; *** $p<0.001$				

Table 13. Indiana 2012-2015 Past-Year Nonmedical Drug Use by Type and Frequency					
	Never (%)	**1-5 times (%)**	**6-19 times (%)**	**20-39 times (%)**	**40 or more times (%)**
Prescription Medicine Not Prescribed to Respondent					
2012	86.7	7.5	3.4	1.1	0.9
2013	86.9	7.9	3	1.1	0.7
2014	88.6	7.3	2.6	0.7	0.6
2015	89.9	6	2.4	0.8	0.5
Own Prescription Misused					
2012	96.1	2	0.8	0.4	0.3
2013	96.6	2	0.7	0.2	0.3
2014	96.8	1.8	0.7	0.3	0.2
2015	96.9	1.6	0.5	0.3	0.2
OTC Medication Misused					
2012	97.1	1.5	0.4	0.1	0
2013	98.2	1.3	0.1	0.1	0
2014	98.4	1	0.1	0.1	0.1
2015	97.9	1.3	0.4	0	0.1

Table 14. Indiana 2015-2015 Past-Month Misuse by Gender				
	2012	**2013**	**2014**	**2015**
Prescription Misuse				
Male (%)	7.2***	6.8***	4.7*	4.1
Female (%)	4.1	3.8	3.4	3.8
Misuse to Get High				
Male (%)	1.9***	1.2	0.9	1.6
Female (%)	0.9	0.9	1	0.8
OTC Misuse				
Male (%)	1.0**	0.6	0.4	0.2
Female (%)	0.5	0.3	0.5	0.3
* p<0.05; ** p<0.01; *** p<0.001				

Table 15. Indiana 2012-2015 Past-Month Drug Use by Year and Frequency					
	Never (%)	**1-5 times (%)**	**6-19 times (%)**	**20-39 times (%)**	**40 or more times (%)**
Prescription Medicine Not Prescribed to Respondent					
2012	89.2	4.1	0.9	0.1	0.1
2013	88.2	4	0.7	0.1	0
2014	88.8	3.2	0.4	0.1	0
2015	87.2	3.1	0.8	0	0
Own Prescription Medication Misused					
2012	93.2	1	0.2	0.1	0
2013	92	0.9	0.1	0	0
2014	91.7	0.7	0.2	0	0
2015	89.9	0.6	0.4	0.1	0.1
OTC Medication Misuse					
2012	93.5	0.5	0.1	0	0
2013	92.5	0.4	0	0	0
2014	92.2	0.3	0.1	0	0
2015	90.9	0.1	0.1	0.1	0.1

Table 16. Indiana 2012-2015 Age of First Misuse									
	Did Not Use (%)	**<10 years (%)**	**10-11 years (%)**	**12-13 years (%)**	**14-15 years (%)**	**16-17 years (%)**	**18-20 years (%)**	**21-25 years (%)**	**26 years and older (%)**
Prescription Medicine Not Prescribed to Respondent									
2012	84.7	0.2	0.1	0.3	1.7	4.3	7.2	1.1	0.1
2013	83.7	0.1	0.1	0.6	2	4.4	7.6	1.1	0.2
2014	86.5	0.1	0.1	0.4	1.7	3.6	5.9	1.1	0.2
2015	87.3	0.2	0.2	0.9	1.8	2.7	5.1	1.2	0.3
Own Prescription Misused									
2012	94.1	0.1	0	0.1	0.7	2	2.1	0.4	0
2013	93.9	0	0	0.2	1	2	2.2	0.4	0.1
2014	94.8	0.1	0	0.2	0.6	1.4	2.3	0.3	0.1
2015	94.3	0.1	0	0.3	0.7	1.3	2.2	0.7	0.2
OTC Medication Misused									
2012	96	0.1	0	0.1	0.8	1.1	1.3	0.1	0
2013	95.9	0	0	0.4	0.8	1.2	1.1	0.1	0
2014	96.8	0.1	0	0.3	0.6	0.9	0.9	0.2	0
2015	96.4	0.1	0	0.3	0.9	0.8	0.9	0.1	0.1

Table 17. Indiana 2016-2018 Nonmedical Past-Month Prescription Drug Use			
	Stimulants (%)	**Painkillers (%)**	**Sedatives (%)**
2016	5.2	2.3	2.2
2017	4.8	2.2	2
2018	5.3	1.7	2

Table 18. Indiana 2016-2018 Past-Month Nonmedical Prescription Drug Use by Gender			
	2016	**2017**	**2018**
Stimulants			
Male	7.7*	6.4*	6.5*
Female	3.8	3.8	4.5
Painkillers			
Male	3.2*	2.2	1.9
Female	1.7	2.1	1.5
Sedatives			
Male	3.4*	2.5*	2.8*
Female	1.4	1.5	1.5
*p<0.05			

Table 19. Indiana 2016-2018 Past-Month Nonmedical Prescription Drug Use by Year and Frequency								
	Never Used (%)	**Used, but not within 30 days (%)**	**1-2 times (%)**	**3-5 times (%)**	**6-9 times (%)**	**10-19 times (%)**	**20-39 times (%)**	**40 or more times (%)**
Stimulants								
2016	86.5	8.3	2.4	1	0.7	0.5	0.2	0.3
2017	87.1	8.1	2.1	1.1	0.6	0.4	0.3	0.2
2018	86.7	8	2.6	1.3	0.6	0.4	0.3	0.2
Painkillers								
2016	90.7	7	1.1	0.5	0.2	0.2	0.1	0.2
2017	91.1	6.7	0.9	0.4	0.3	0.2	0.1	0.2
2018	93.1	5.2	0.8	0.4	0.3	0.1	0	0.1
Sedatives								
2016	92.1	5.5	1.2	0.4	0.3	0.2	0.1	0.1
2017	92.8	5.3	0.9	0.3	0.3	0.2	0.1	0.1
2018	93.2	4.8	1.1	0.4	0.3	0.1	0.1	0.1

Table 20. Butler 2012-2018 Response Survey Inclusion Rates			
	Invited	**Responded (%)**	**Included (%)**
2012	1342	525 (39.1)	507 (96.6)
2014	1100	428 (38.9)	396 (92.5)
2016	1000	374 (37.4)	365 (36.5)
2018	1000	246 (24.6)	245 (24.5)

Table 21. Butler 2010-2014 Past-Year Drug Use			
	Prescription Not Prescribed (%)	**Own Prescription Used to Get High (%)**	**OTC Used to Get High (%)**
2010	8.7	4	3.1
2012	7.1	2.4	1.2
2014	10.6	2.3	1

Table 22. Butler 2012 and 2014 Past-Year Nonmedical Drug Use by Class, Frequency, and Year					
	Never (%)	**1-5 times (%)**	**6-19 times (%)**	**20-39 times (%)**	**40 or more times (%)**
Prescription Medicine Not Prescribed to Respondent					
2012	92.3	5.5	19.19	0.2	0.4
2014	89.1	6.8	2.8	0.8	0.3
Own Medication Misused to get high					
2012	96.8	1	1	0.2	0.2
2014	97.5	1.5	0.8	0	0
OTC Medicine Misused					
2012	97	1.2	0	0	0
2014	98.7	1	0	0	0

Table 23. Butler 2010-2014 Past-Month Drug Use

	Prescription Not Prescribed (%)	Own Prescription Used to Get High (%)	OTC Used to Get High (%)
2010	5	1.2	0.6
2012	1.8	0.8	0
2014	3.3	0.5	0

Table 24. Butler 2012 and 2014 Past-Month Nonmedical Drug Use by Class, Frequency, and Year					
	Never (%)	1-5 times (%)	6-19 times (%)	20-39 times (%)	40 or more times (%)
Prescription Medicine Not Prescribed to Respondent					
2012	92.9	1.4	0.4	0	0
2014	93.7	3	0.3	0	0
Own Medication Misused					
2012	93.9	0.8	0	0	0
2014	96.5	0.5	0	0	0
OTC Medication Misused					
2012	94.1	0	0	0	0
2014	97	0	0	0	0

Table 25. Butler 2016 and 2018 Past-Month Nonmedical Prescription Drug Use by Class, Frequency, and Year								
	Never Used (%)	Used, but not within 30 days (%)	1-2 times (%)	3-5 times (%)	6-9 times (%)	10-19 times (%)	20-39 times (%)	40 or more times (%)
Stimulants								
2016	87.9	6.9	2.5	1.1	1.4	0.3	-	-
2018	86.1	7.3	4.1	1.2	0.4	0.4	-	0.4
Painkillers								
2016	93.4	5.8	0.3	0.3	-	0.3	-	-
2018	94.7	3.3	0.4	0.8	0.8	-	-	-
Sedatives								
2016	94.2	3.8	0.8	0.8	-	0.3	-	-
2018	95.5	2.9	0.4	0.8	0.4	-	-	-

Table 26. Butler 2016 and 2018 Friends' Perceptions on Drug Use by Approval and Year					
	Strongly Disapprove (%)	Somewhat Disapprove (%)	Neither Approve nor Disapprove (%)	Somewhat Approve (%)	Strongly Approve (%)
Using a Prescription Medication Not Prescribed to Respondent					
2016	65.7	20.2	12	1.5	0.6
2018	61.7	21.7	10.9	3.5	2.2
Using Amphetamines 1 or 2 Times					
2012	24.3	17	29.4	24.7	4.1
2014	16.7	21	27.8	26	8.3
Using Amphetamines Regularly					
2012	44.6	25.8	18.3	8.7	2
2014	39.1	27.8	20.7	9.6	1.8

Table 27. Butler and Indiana 2012 and 2014 Perceptions of Amphetamine Use 1-2 times by Approval and Year					
	Strongly Disapprove (%)	**Somewhat Disapprove (%)**	**Neither Approve nor Disapprove (%)**	**Somewhat Approve (%)**	**Strongly Approve (%)**
2012					
Butler	24.3	17	29.4	24.7	4.1
Indiana	21.3	16.8	27.3	23.8	10.3
2014					
Butler	16.7	21	27.8	26	8.3
Indiana	25.3	16.3	27.3	21.7	8.7

Table 28. Butler and Indiana 2012 and 2014 Other Students' Perceptions of Regular Amphetamine Use by Approval and Year					
	Strongly Disapprove (%)	**Somewhat Disapprove (%)**	**Neither Approve nor Disapprove (%)**	**Somewhat Approve (%)**	**Strongly Approve (%)**
2012					
Butler	44.6	25.8	18.3	8.7	2
Indiana	38.5	24.1	21.7	10.7	3.9
2014					
Butler	39.1	27.8	20.7	9.6	1.8
Indiana	40.8	22.2	22.4	9.6	3.6

Table 29. Butler and Indiana 2016 and 2018 Friends' Perceptions of Nonmedical Prescription Drug Use by Approval and Year					
	Strongly Disapprove (%)	**Somewhat Disapprove (%)**	**Neither Approve nor Disapprove (%)**	**Somewhat Approve (%)**	**Strongly Approve (%)**
2016					
Butler	65.7	20.2	12	1.5	0.6
Indiana	64.2	17.7	13.9	2.8	1.3
2018					
Butler	61.7	21.7	10.9	3.5	2.2
Indiana	62.1	19.6	14.6	2.3	1.4

Table 35. Comparison of Handbooks, Policies, and Procedures related to Substance Misuse and Academic Honesty

	Butler University	Faculty/ Staff	COPHS	PA Program	Music Education	BUMB/ BUBB	Athletes
Conduct Code	No Honor Code; Rules of Conduct	Workplace Standards	Professional Conduct Code	PA Honor Code; Didactic and Clinical Year Professional Requirements	-	No tolerance-dismissal and "F"	Code of Conduct; Standards of conduct
Substance Misuse Policy	No student substance misuse policy	HR Substance Misuse policy;	Definition of substance abuse; Student Substance Use, Abuse, or Dependency Policy; Self-report issues	-	-	-	-
Drug Testing	-	reasonable suspicion testing	-	Drug Screening Policy	-	-	Drug testing
Reporting Methods	No academic reporting methods or responsibilities	-	Conduct Reporting time-specifics	-	-	-	-
Academic dishonesty definition	Cheating definition; includes Facilitation in academic dishonesty	-	Cheating definition with added clause; Academic dishonesty definition includes Collusion	-	-	-	Academic honesty/ dishonesty
Concern and conduct process		-	Concern and Complaint Process Diagram	-	-	-	Conduct process explained
Self-disclosure	No self-disclosure of arrests requirement	-	Must report criminal misconduct	-	Must report criminal misconduct	-	Self-reporting? Encourage self-report of issue
Assistance programs	-	Employee assistance program	-	-	-	-	-

Figures

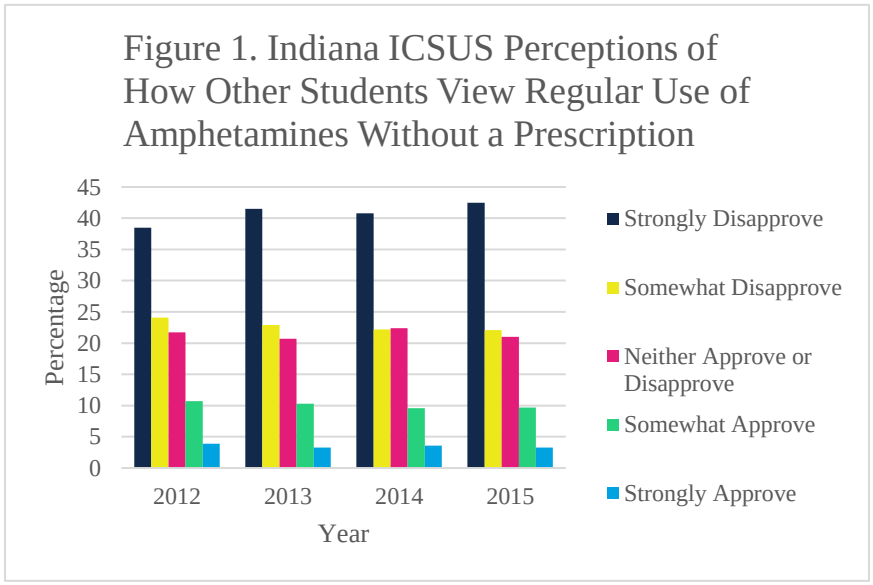


Figure 1. Indiana ICSUS Perceptions of How Other Students View Regular Use of Amphetamines Without a Prescription
Percentage
45
40
35
30
25
20
15
10
5
0
2012
2013
2014
2015
Year
Strongly Disapprove
Somewhat Disapprove
Neither Approve or Disapprove
Somewhat Approve
Strongly Approve

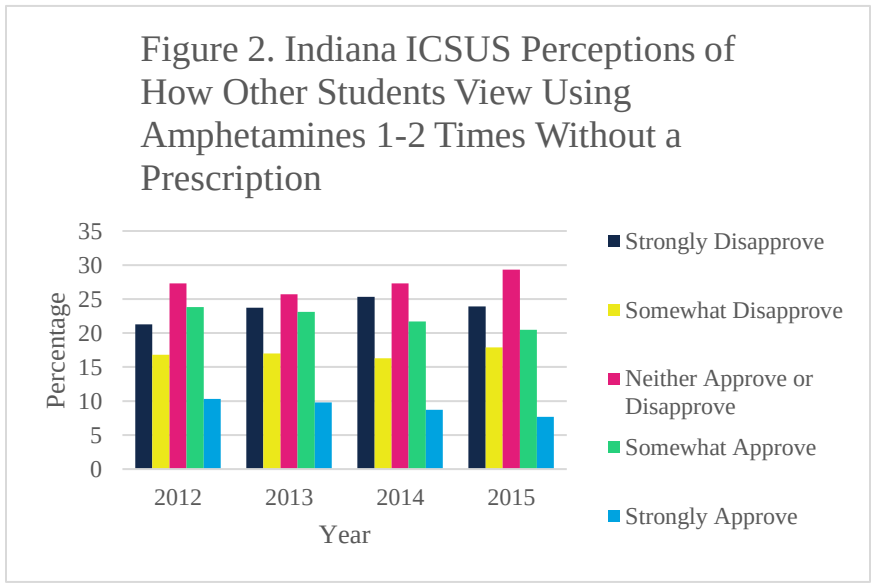


Figure 2. Indiana ICSUS Perceptions of How Other Students View Using Amphetamines 1-2 Times Without a Prescription
Percentage
35
30
25
20
15
10
5
0
2012
2013
2014
2015
Year
Strongly Disapprove
Somewhat Disapprove
Neither Approve or Disapprove
Somewhat Approve
Strongly Approve

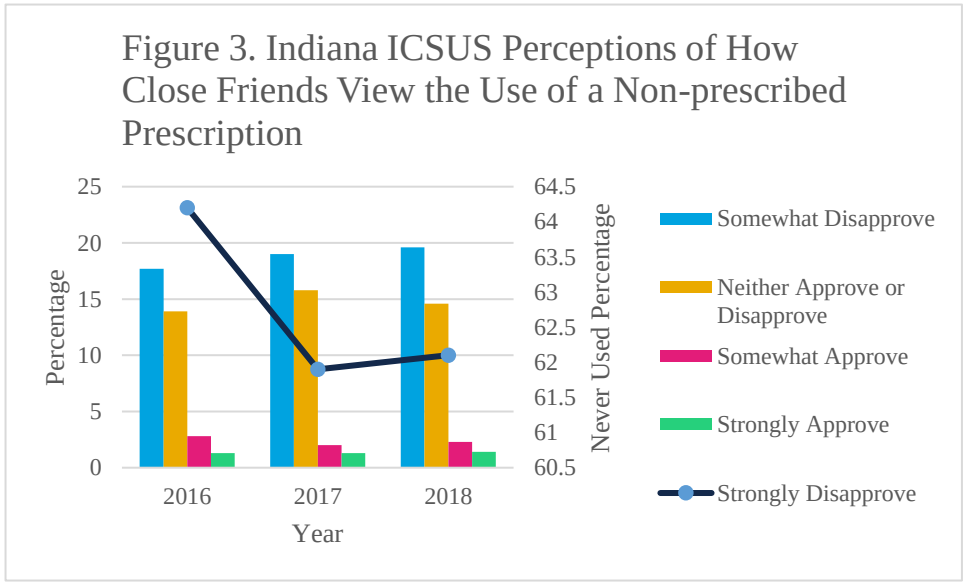


Figure 3. Indiana ICSUS Perceptions of How Close Friends View the Use of a Non-prescribed Prescription
Percentage
25
20
15
10
5
0
64.5
64
63.5
63
62.5
62
61.5
61
60.5
Never Used Percentage
2016
2017
2018
Year
Somewhat Disapprove
Neither Approve or Disapprove
Somewhat Approve
Strongly Approve
Strongly Disapprove

Figure 4. Butler 2012-2014 Perceived 'Other Student' Perspective on Amphetamine Use 1-2 Times Without a Prescription

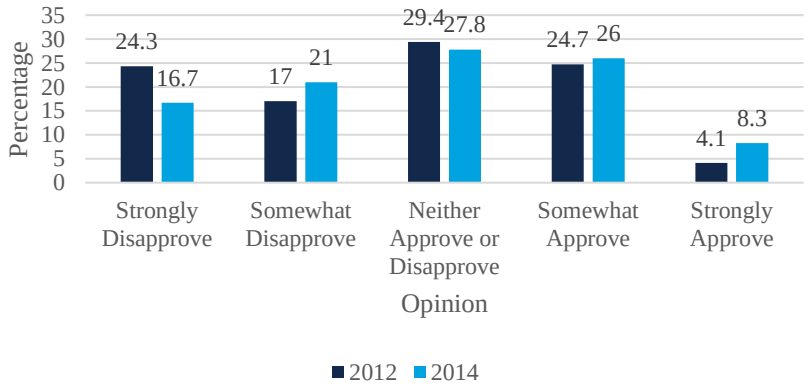


Figure 5. Butler 2012-2014 'Other Student' Perceived Perspective on Regular Use of Amphetamines Without a Prescription

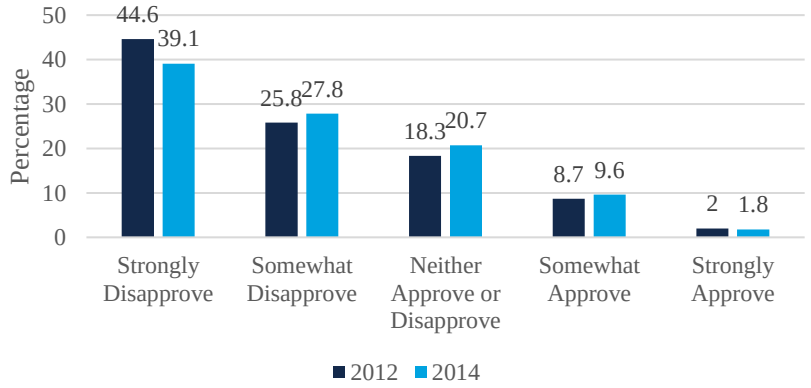


Figure 6. Butler 2016-2018 Friends' Perspective on Using a Medication Not Prescribed to the Respondent

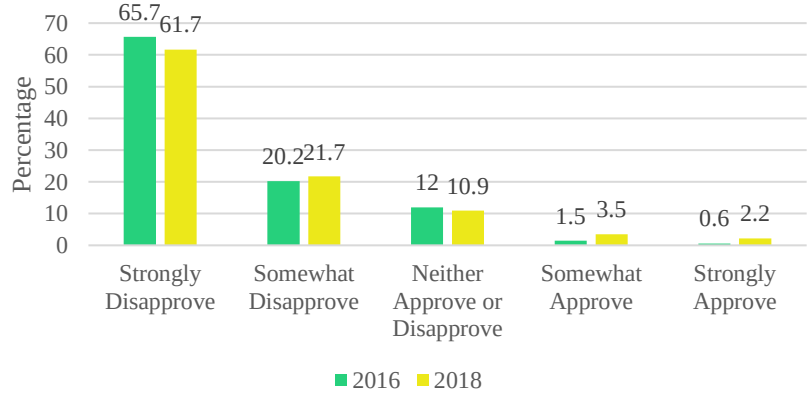


Figure 7. Indiana and Butler 2012 & 2014 Past-Month Use

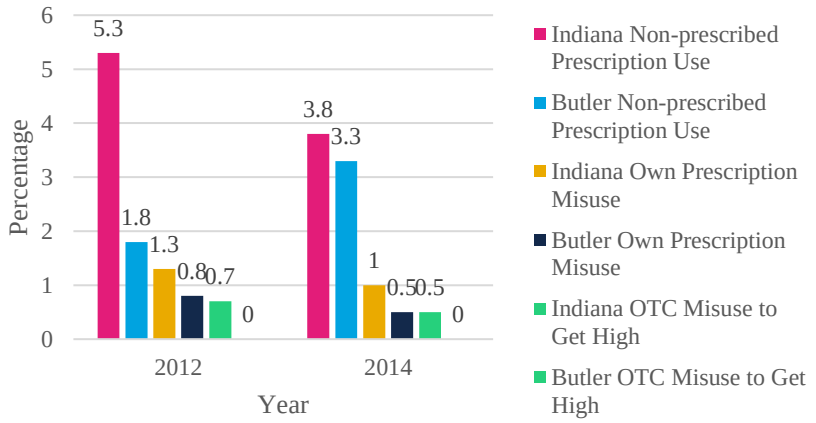


Figure 8. Indiana and Butler 2012 & 2014 Past-Year Use

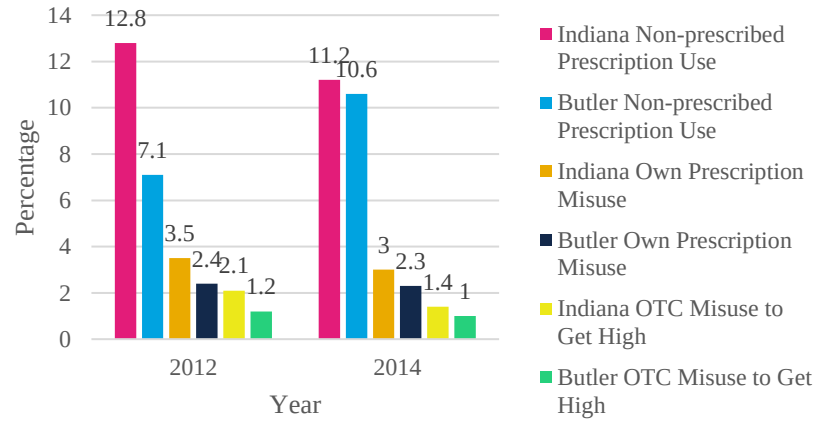


Figure 9. Indiana and Butler 2016 & 2018 Past-Month Use

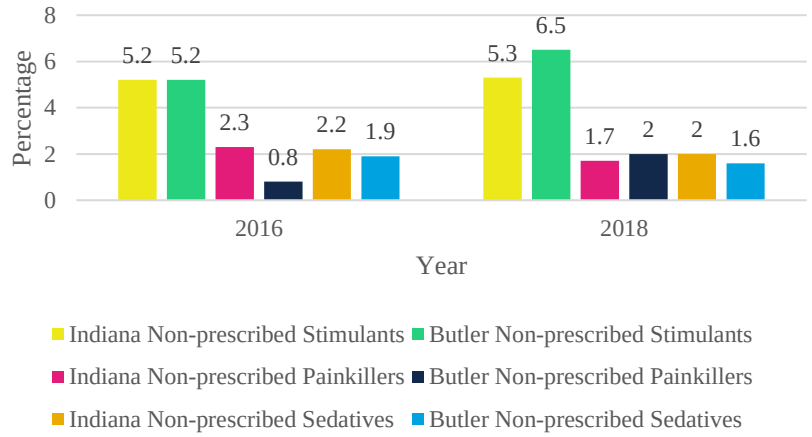
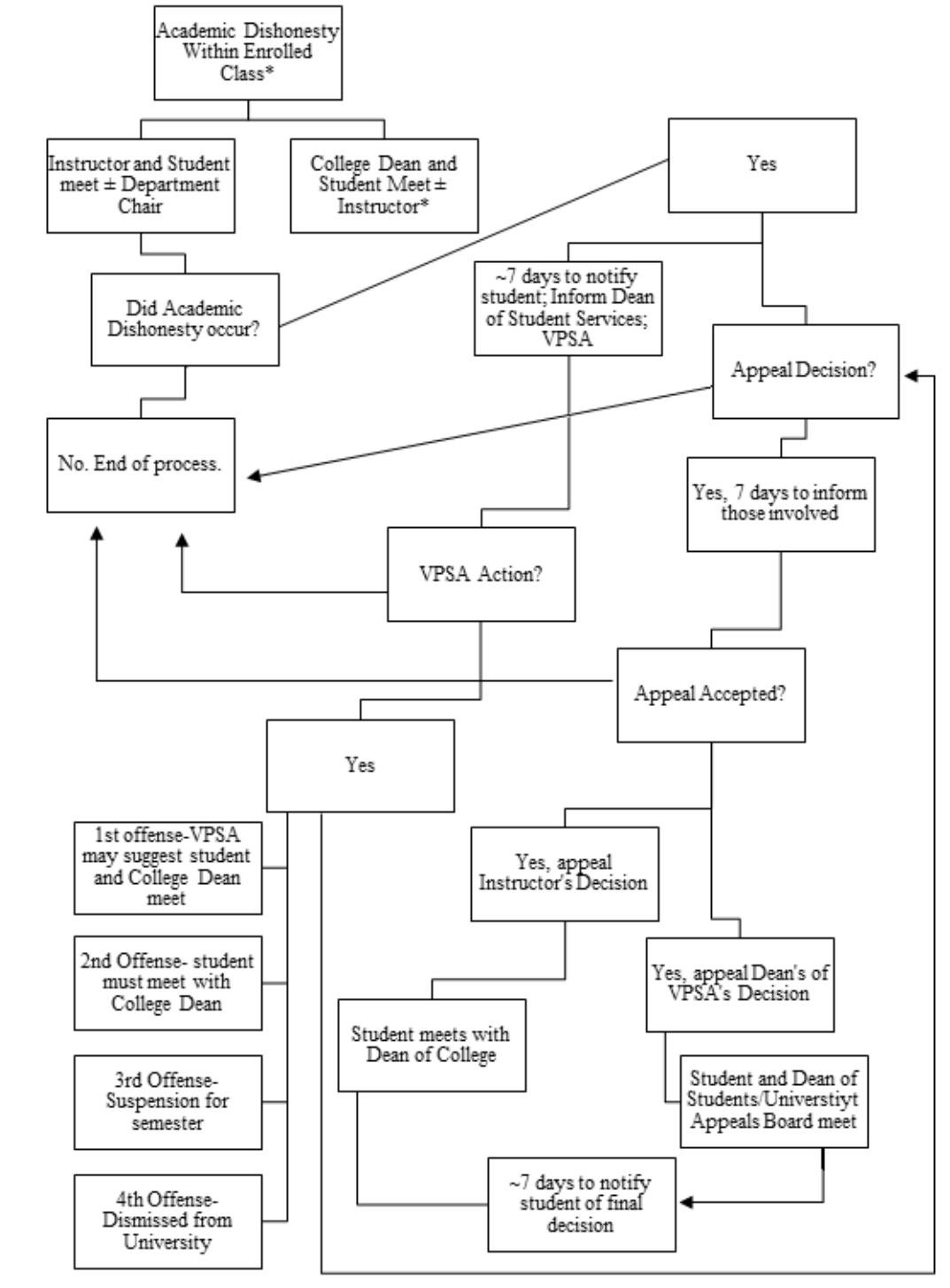


FIGURE 10. Butler University Academic Dishonesty Procedure[89]



*If the academic dishonesty occurs in a course the student is not enrolled in, they automatically meet with the course instructor and dean of the student's college; VPSA = Vice President of Student Affairs

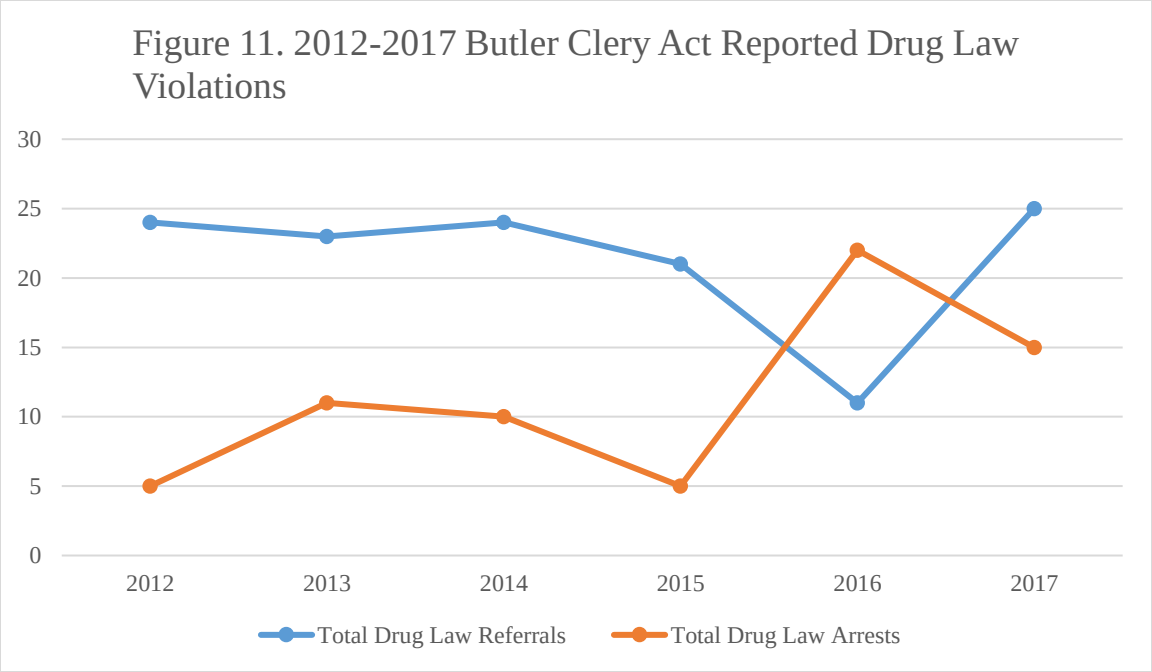
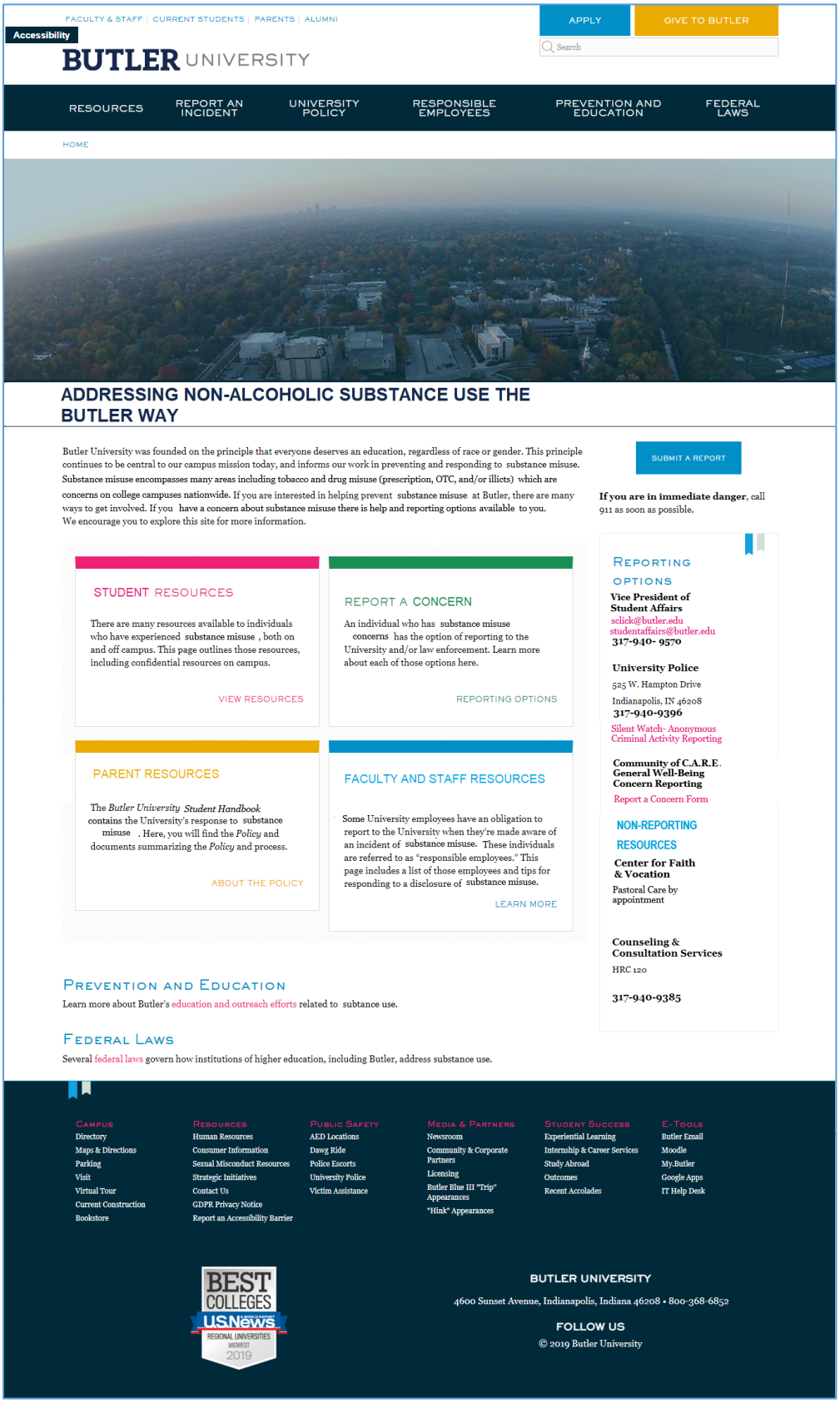


Figure 11. 2012-2017 Butler Clery Act Reported Drug Law Violations
30
25
20
15
10
5
0
2012
2013
2014
2015
2016
2017
Total Drug Law Referrals
Total Drug Law Arrests

Figure 12. Example Homepage of the Non-alcohol Substance Misuse Website



Appendices

Appendix A- 2018-2019 NCAA Banned Drugs List.[98] Reprinted with permission.

2018-19 NCAA Banned Drugs

It is your responsibility to check with the appropriate or designated athletics staff before using any substance.

The NCAA bans the following classes of drugs:

a. Stimulants.
b. Anabolic Agents.
c. Alcohol and Beta Blockers (banned for rifle only).
d. Diuretics and Other Masking Agents.
e. Illicit Drugs.
f. Peptide Hormones and Analogues.
g. Anti-estrogens.
h. Beta-2 Agonists.

Note: Any substance chemically related to these classes is also banned.
The institution and the student-athlete shall be held accountable for all drugs within the banned drug class regardless of whether they have been specifically identified. See *exceptions* in the following examples listed for each class.

Drugs and Procedures Subject to Restrictions:

a. Blood Doping.
b. Gene Doping.
c. Local Anesthetics (under some conditions).
d. Manipulation of Urine Samples.
e. Beta-2 Agonists permitted only by prescription and inhalation (i.e. Albuterol).

NCAA Nutritional/Dietary Supplements WARNING:

Before consuming any nutritional/dietary supplement product, review the product with the appropriate or designated athletics department staff!

- Dietary supplements, including vitamins and minerals, are not well regulated and may cause a positive drug test result.
- Student-athletes have tested positive and lost their eligibility using dietary supplements.
- Many dietary supplements are contaminated with banned drugs not listed on the label.
- **Any product containing a dietary supplement ingredient is taken at your own risk.**

Check with your athletics department staff prior to using a supplement.

Some Examples of NCAA Banned Substances in Each Drug Class.

THERE IS NO COMPLETE LIST OF BANNED SUBSTANCES.
Do not rely on this list to rule out any label ingredient.

Stimulants:

amphetamine (Adderall); caffeine (guarana); cocaine; ephedrine; methamphetamine; methylphenidate (Ritalin); synephrine (bitter orange); dimethylamylamine (DMAA, methylhexanamine); "bath salts" (mephedrone); Octopamine; hordenine; dimethylbutylamine (DMBA, AMP, 4-amino methylpentane citrate); phenethylamines (PEAs); dimethylhexylamine (DMHA, Octodrine) etc.

exceptions: *phenylephrine and pseudoephedrine are not banned*.

Anabolic Agents (sometimes listed as a chemical formula, such as 3,6,17-androstenetrione):

Androstenedione; boldenone; clenbuterol; DHEA (7-Keto); epi-trenbolone; testosterone; etiocholanolone; methasterone; methandienone; nandrolone; norandrostenedione; stanozolol; stenbolone; trenbolone; SARMS (ostarine, ligandrol, LGD-4033); etc.

Alcohol and Beta Blockers (banned for rifle only):

alcohol; atenolol; metoprolol; nadolol; pindolol; propranolol; timolol; etc.

Diuretics (water pills) and Other Masking Agents:

bumetanide; chlorothiazide; furosemide; hydrochlorothiazide; probenecid; spironolactone (canrenone); triameterene; trichlormethiazide; etc.

exceptions: finasteride is not banned.

Illicit Drugs:

heroin; marijuana; tetrahydrocannabinol (THC); synthetic cannabinoids (e.g., spice, K2, JWH-018, JWH-073).

Peptide Hormones and Analogues:

growth hormone(hGH); human chorionic gonadotropin (hCG); erythropoietin (EPO); IGF-1 (colostrum, deer antler velvet); etc.

exceptions: insulin, Synthroid are not banned.

Anti-Estrogens :

anastrozole; tamoxifen; formestane; ATD, clomiphene; SERMS (nolvadex); Arimidex; clomid; evista; fulvestrant; aromatase inhibitors (Androst-3,5-dien-7,17-dione), letrozole; etc.

Beta-2 Agonists:

bambuterol; formoterol; salbutamol; salmeterol; higenamine; norcoclaurine; etc.

Any substance that is chemically related to one of the above classes, even if it is not listed as an example, is also banned!

Information about ingredients in medications and nutritional/dietary supplements can be obtained by **contacting Drug Free Sport AXIS, 877-202-0769 or** www.drugfreesport.com/axis **password ncaa1, ncaa2 or ncaa3.**

It is your responsibility to check with the appropriate or designated athletics staff before using any substance.

NCAA/05_30_2018/SH:tas

Appendix B- *The Duke Community Standard in Practice: A Guide for Undergraduates - Appendix F- Information and Resources Concerning Substance Use* (pp. 70-76)[104] Reprinted with permission.

APPENDIX F – INFORMATION AND RESOURCES CONCERNING SUBSTANCE USE

HEALTH EFFECTS OF ALCOHOL AND OTHER DRUGS

Psychoactive drugs are a class of drugs most frequently used socially or recreationally (and often illegally). These drugs act on the central nervous system (CNS), or more specifically the brain, creating altered states of consciousness. They may increase CNS activity (stimulants, such as cocaine, crack, amphetamines), decrease CNS activity (depressants, such as alcohol, barbiturates, tranquilizers), cause the creation of illusions (hallucinogens, such as LSD, peyote, mushrooms, PCP), or have a combined effect (marijuana). Every drug has multiple effects on the brain and the body. Addiction to any of these substances is a disease that affects the sufferer mentally, emotionally, physically, and spiritually. It can also have a profound effect on those closest to the addicted person.

SHORT TERM OR ACUTE EFFECTS

Impaired judgment (violent behavior, physical injuries, accidents), unpredictable mood swings, acute psychotic episodes, risky sexual behaviors (unplanned pregnancy, impaired sexual response, sexually transmitted diseases), sexual assault, rape, hangovers, increased nervousness, tremors, shortness of breath, anxiety/panic reactions, reduced energy and stamina, digestive problems (nausea, vomiting, diarrhea, ulcer irritation), dehydration, halitosis, cardiovascular changes, seizures, loss of consciousness, death.

LONG TERM OR CHRONIC EFFECTS

- **Systemic Disorders.** Increased heart rate, increased or sudden decrease in blood pressure, hyperactivity, decreased oxygen in blood supply to the brain, decreased immune system function, AIDS or hepatitis from needle sharing, reverse tolerance, hemorrhage, delirium tremens (D.T.s) from acute withdrawal, death.
- **Brain/Central Nervous System Disorders.** Short-term memory loss, concentration difficulties, damaged nerve connections, disruption of "chemical messengers."
- **Mental Health Disorders.** Sleep disorders, eating disorders, fatigue, acute or chronic depression, hallucinations, suicidal thoughts/actions, personality changes, delusional states, anxiety disorders, psychosis.
- **Digestive Disorders.** Ulcers in the mouth, diseases of the gums, inflammation of the esophagus, stomach, and pancreas, ulcers, cirrhosis, fatty liver disease, alcoholic hepatitis.
- **Respiratory System Disorders.** Painful nosebleeds, nasal erosion, tuberculosis, chronic lung diseases including emphysema and chronic bronchitis, exacerbation of sinus and asthma conditions, increased risk of lung cancer, decreased vital lung capacity.
- **Sexual/Reproductive Disorders.** Impotence, atrophy of testicles, impaired sperm production, absence of menstrual period, decrease in desire/arousal/performance, birth defects.
- **Endocrine/Nutrition/Metabolic Disorders.** Malnutrition, vitamin/mineral deficiencies, acute gout, obesity, diabetes, decreased testosterone levels in men, appetite disorders, weight gain or loss, impaired immune system.
- **Skin and Subcutaneous Tissue Disorders.** Skin infections, unsightly changes in the skin, dry skin, boils, skin abscesses, itching, increase in skin moles and benign skin tumors, spider angiomas, edema.
- **Pregnancy and Fetal Development.** Fetal Alcohol Syndrome, low birth weight babies, increased risk of miscarriage, stillbirth, increased risk of Sudden Infant Death Syndrome, brain damage, congenital deformities, addiction in the newborn.
- **Other Disorders.** Prone to cross-addiction to other drugs including prescription medications, laxatives, analgesics, and caffeine. Additionally, chronic abusers have an increased incidence of fractures, sprains, burns, lacerations, bruises, concussions, and other traumas.

FEDERAL PENALTIES AND SANCTIONS FOR ILLEGAL POSSESSION OF A CONTROLLED SUBSTANCE (FROM GPO.GOV/FDSYS)

21 U.S.C. 844(a)

1st conviction: Up to 1 year imprisonment and fined at least $1,000 but not more than $100,000, or both.

After one (1) prior drug conviction: At least 15 days in prison, not to exceed two (2) years and fined at least $2,500 but not more than $250,000, or both.

After 2 or more prior drug convictions: At least 90 days in prison, not to exceed 3 years and fined at least $5,000 but not more than $250,000, or both.

Special sentencing provision for possession of crack cocaine: Mandatory at least 5 years in prison, not to exceed 20 years and fined up to $250,000, or both, if:

- 1st conviction and the amount of crack possessed exceeds five (5) grams.
- 2nd crack conviction and the amount of crack possessed exceeds three (3) grams.
- 3rd or subsequent crack conviction and the amount of crack possessed exceeds 1 gram.

21 U.S.C. 853(a)(2) and 881(a)(7)

Forfeiture of personal and real property used to possess or to facilitate possession of a controlled substance if that offense is punishable by more than one year of imprisonment. (See special sentencing provisions re: crack.)

21 U.S.C. 881(a)(4)

Forfeiture of vehicles, boats, aircraft or any other conveyance used to transport or conceal a controlled substance.

21 U.S.C. 844a

Civil fine of up to $10,000.

21 U.S.C. 853a

Denial of Federal benefits, such as student loans, grants, contracts, and professional and commercial licenses, up to 1 year for first offense, up to 5 years for second and subsequent offenses.

18 U.S.C. 922(g)

Ineligible to receive or possess a firearm or ammunition.

Miscellaneous

Revocation of certain Federal licenses and benefits, e.g., pilot licenses, public housing tenancy, etc., are vested within the authorities of individual Federal agencies. Note: These are only Federal penalties and sanctions. Additional State of North Carolina penalties and sanctions may apply.

Effect on Financial Aid

Under the 2000 reauthorization of the Higher Education Act, eligibility for federal student aid is jeopardized for students convicted of a drug possession charge. For a first conviction, eligibility for aid may be suspended for one year; two years for a second; permanently for a third. Eligibility is restored once a student completes a drug rehabilitation program or has the conviction overturned.

NORTH CAROLINA STATE LAWS REGARDING ALCOHOL AND DRUGS

For complete information regarding North Carolina state laws governing drugs, consult the North Carolina Controlled Substances Act or the North Carolina Toxic Vapors Act in the North Carolina General Statutes, Article 5, Chapter 90.

For complete information regarding North Carolina state laws governing alcohol, consult the North Carolina General Statutes, Chapter 18B. Criminal penalties for a violation of these laws include a misdemeanor conviction, community service, possible loss of driver's license, and/or fines. Repeat violations incur greater penalties. The complete statutes are available online at **ncga.state.nc.us/gascripts/Statutes/Statutes.asp**.

RESOURCES FOR ALCOHOL, DRUG, AND TOBACCO CONCERNS

Emergency Phone Numbers

Duke Emergency Medical Service and/or Police 911/919-684-2444

Alcohol-related emergencies can be difficult to assess. When in doubt, contact professionals.

Duke Hospital Emergency Department 911/919-684-2413

If an intoxicated student cannot be aroused, is breathing erratically or slowly, or appears to be in a life-threatening state, get the student to the Emergency Department. Duke Emergency Medical Service or Duke Police can assist in transporting students.

24-hour confidential advice on alcohol or drug-related emergencies can be obtained through Holly Hill Hospital at 1-800-422-1840 or 1-800-447-1800.

Local Inpatient/Outpatient Treatment Facilities

Holly Hill Hospital 919-250-7000
3019 Falstaff Road
Raleigh, NC 27610
hollyhillhospital.com

Fellowship Hall 800-659-3381
5140 Dunstan Road
Greensboro, NC 27405
fellowshiphall.com

Local Outpatient Treatment Facilities

Duke Child Development and Behavioral Health 919-668-5559
402 Trent Drive
DUMC Box 2906
Durham, NC 27710
ipmh.duke.edu/content/cdbh

Information, Screening, and Education

DuWell **studentaffairs.duke.edu/duwell** 919-681-8421

DuWell provides substance use screenings for students which identify risk factors and assist the student to develop a harm reduction plan with the goal to minimize problems regarding substance use. DuWell offers assistance and support for students interested in changing their substance use patterns. The office provides assistance with educational programming for student living groups and organizations.

Student Health **studentaffairs.duke.edu/studenthealth** 919-681-WELL (9355)

Student Health offers screening, evaluation, education and referral for alcohol and substance use/ abuse.

Individual Assessment and Counseling

Counseling and Psychological Services (CAPS) **studentaffairs.duke.edu/caps** 919-660-1000

CAPS offers evaluation, consultation, counseling, and referral for individuals with alcohol and other substance abuse issues. A substance abuse specialist is available for personal consultation and counseling for students who are concerned about themselves or others because of alcohol or drug use.

UNC Health Care's Alcohol and Substance Abuse Program 919-966-6039
www.unchealthcare.org/site/healthpatientcare/alcoholsubstanceabuse

UNC offers a center for intensive outpatient treatment of chemical dependency and substance abuse.

Cocaine Anonymous **ca.org** 1-800-347-8998

An around-the-clock information and referral service, staffed by recovering cocaine addict counselors.

First Step Services **www.firststepnc.com** 919-833-8899

First Step specializes in intensive outpatient programs for individuals suffering from drug and alcohol abuse, stressing abstinence from mind and mood altering substances during the course of treatment.

C.S.A.P. 1-800-662-HELP; 1-800-662-9832 for information in Spanish

A 24-hour hotline maintained by the Center of Substance Abuse Prevention offers confidential information and referral.

N.C.A.D.I. **www.samhsa.gov** 1-800-729-6686

The National Clearinghouse for Alcohol and Drug Information offers free print information on alcohol and other drugs. Other media may be available for rent or purchase.

Cancer Information Service 1-800-422-6237

Free telephone smoking cessation counseling, materials, support, referrals. Information in Spanish when needed.

American Lung Association 1-800-586-4872

Self-help materials available.

Academic courses related to alcohol use, treatment, and research

See course listings through the Office of University Registrar (**registrar.duke.edu**) or the Bulletin of each school.

Support Groups

Alcoholics Anonymous (AA) **aanc32.org / aanc33.org** 919-286-9499 / 1-800-662-4357

AA offers emergency support for individuals with alcohol problems in addition to group meetings. Many have found the 12-step program to be crucial in their recovery. Meeting locations in the Durham area can be found on the AA website.

Narcotics Anonymous (NA) **na.org** 919-956-5900

Similar to Alcoholics Anonymous, except focused on drug abuse/addiction issues. A variety of drugs are addressed, including marijuana and prescription medications.

ACOA/Al-Anon **al-anon.alateen.org** 919-403-0687 / 1-888-4AL-ANON

ACOA and Al-Anon meetings are support groups for family members dealing with the impact of living with, or being close to an alcoholic. Meeting locations in the Durham area can be found on the Al-Anon website.

FEDERAL DRUG TRAFFICKING PENALTIES FOR MARIJUANA (SCHEDULE I)			
Drug	**Quantity**	**First Offense**	**Second Offense**
Marijuana	1,000 kg or more mixture; or 1,000 or more plants	Not less than 10 years or more than life If death or serious bodily injury, not less than 20 years or more than life Fine not more than $10 million if an individual, $50 million if other than an individual	Not less than 20 years or more than life If death or serious bodily injury, life imprisonment Fine not more than $20 million if an individual, $75 million if other than an individual
Marijuana	100 kg to 999 kg mixture; or 100 to 999 plants	Not less than 5 years or more than 40 years If death or serious bodily injury, not less than 20 years or more than life Fine not more than $5 million if an individual, $25 million if other than an individual	Not less than 10 years or more than life If death or serious bodily injury, life imprisonment Fine not more than $8 million if an individual, $50 million if other than an individual
Marijuana	50 kg to 99 kg mixture; or 50 to 99 plants	Not more than 20 years If death or serious bodily injury, not less than 20 years or more than life Fine $1 million if an individual, $5 million if other than an individual	Not more than 30 years If death or serious bodily injury, life imprisonment Fine $2 million if an individual, $10 million if other than individual
Hashish	More than 10 kg		
Hashish Oil	More than 1 kg		
Marijuana	Less than 50 kg (but does not include 50 or more plants regardless of weight) 1-49 marijuana plants	Not more than 5 years Fine not more than $250,000, $1 million other than individual	Not more than 10 years Fine $500,000 if an individual, $2 million if other than individual
Hashish	10 kg or less		
Hashish Oil	1 kg or less		

Source: bit.ly/federaldrugtraffickingpenalties

FEDERAL DRUG TRAFFICKING PENALTIES

Drug/Schedule	Quantity	Penalties	Quantity	Penalties
Cocaine (Schedule II)	500-4999 gms mixture	First Offense: Not less than 5 years, and not more than 40 yrs. If death or serious bodily injury, not less than 20 years or more than life. Fine of not more than $5 million if an individual, $25 million if not an individual Second Offense: Not less than 10 years, and not more than life. If death or serious bodily injury, life imprisonment. Fine of not more than $8 million if an individual, $50 million if not an individual	5 kg or more	First Offense: Not less than 10 years, and not more than life. If death or serious bodily injury, not less than 20 years or more than life. Fine of not more than $10 million if an individual, $50 million if not an individual Second Offense: Not less than 20 years, and not more than life. If death or serious bodily injury, life imprisonment. Fine of not more than $20 million if an individual, $75 million if not an individual 2 or more prior offenses: Life imprisonment. Fine of not more than $20 million if an individual, $75 million if not an individual
Cocaine Base (Schedule II)	28-279 gms mixture		280 gms or more mixture	
Fentanyl (Schedule IV)	40-399 gms mixture		400 gms or more mixture	
Fentanyl Analogue (Schedule I)	10-99 gms mixture		100 gms or more mixture	
Heroin (Schedule I)	100-999 gms mixture		1 kg or more mixture	
LSD (Schedule I)	1-9 gms mixture		10 gms or more mixture	
Methamphetamine (Schedule II)	5-49 gms pure or 50-499 gms mixture		50 gms or more pure or 500 gms or more mixture	
PCP (Schedule II)	10-99 gms pure or 100-999 gms mixture		100 gms or more pure or 1 kg or more mixture	

		Penalties
Other Schedule I & II substances	Any amount	First Offense: Not more that 20 years. If death or serious bodily injury, not less than 20 years, or more than life. Fine $1 million if an individual, $5 million if not an individual Second Offense: Not more than 30 years. If death or serious bodily injury, life imprisonment. Fine $2 million if an individual, $10 million if not an individual
Any drug product containing Gamma Hydroxybutyric Acid	Any amount	
Flunitrazepam (Schedule IV)	1 gm or more	
Other Schedule III drugs	Any amount	First Offense: Not more than 10 years. If death or serious bodily injury, not more than 15 years. Fine not more than $500,000 if an individual, $2.5 million if not an individual Second Offense: Not more than 20 years. Fine not more than $1 million if an individual, $5 million if not an individual
All other Schedule IV drugs (other than one gram or more of Flunitrazepam)	Any amount	First Offense: Not more than 5 years. Fine not more than $250,000 if an individual, $1 million if not an individual Second Offense: Not more than 10 years. Fine not more than $500,000 if an individual, $2 million if not an individual
All Schedule V drugs	Any amount	First Offense: Not more than 1 year. Fine not more than $100,000 if an individual, $250,000 if not an individual Second Offense: Not more than 4 years. Fine not more than $200,000 if an individual, $500,000 if not an individual

Highlights of State Statutes

It is illegal for anyone less than 21 years of age to:

- Possess or consume malt beverages, unfortified or fortified wine, spirituous liquor, or mixed beverages;
- Purchase or attempt to purchase malt beverages, unfortified or fortified wine, spirituous liquor, or mixed beverages.

It is illegal for anyone (regardless of age) to:

- Aid or abet another in the unlawful sale, purchase, or possession of malt beverages, unfortified or fortified wine, spirituous liquor, or mixed beverages;
- Fraudulently use identification in obtaining or attempting to obtain alcoholic beverages.

APPENDIX G – PATIENT PRIVACY

The Health Insurance Portability and Accountability Act of 1996, or HIPAA, includes a privacy rule that creates national standards to protect individuals' personal health information. These standards were implemented by the Duke Health Enterprise on April 14, 2003.

Duke Student Health, Counseling and Psychological Services, and the Office of Gender Violence Prevention and Intervention comply with these standards. All incoming students are asked to review and electronically sign the HIPAA notice as part of the immunization and health history process. Students who have not yet received the Notice of Privacy Practices brochure, which describes how medical information may be used and disclosed and how one can get access to this information, will receive this at the first visit.

APPENDIX H – THEME PARTIES AND DECORATIONS

This policy applies to all Duke University facilities. All students must adhere to this policy when planning a theme party, event, meeting, or decorating any work area. If you have any questions as to whether your decorations fall within the limits allowed by this policy, please contact the Occupational and Environmental Safety Office-Fire Safety Division at 919-684-5609 72 hours prior to the date of the actual event/party or placement of the decorations.

GENERAL RESTRICTIONS

- Fog and smoke machines may not be used inside facilities without written authorization of the OESO-Fire Safety Division.
- Animal(s), regardless of size or species, are strictly prohibited to attend or participate in any event, party, or meeting.
- Water, waterfalls, pools, spraying water, running water, or utilizing water in any way is strictly prohibited.
- Combustible natural decorations such as straw, hay, corn fodder, dried flowers, bamboo, and other similar decorations are prohibited as decoration inside facilities without written authorization from the OESO-Fire Safety Division.
- Combustible decorations shall be prohibited unless they are flame retardant. (Exception: Combustible decorations, such as photographs and paintings, in such limited quantities that a hazard of fire development or spread is not present).
- All doors (i.e., exit, smoke, fire, interior, exterior), hallways, or any other means of egress may not be covered or blocked in any manner by decorations.
- Trash must not be allowed to accumulate, but collected in appropriate containers during the event and removed at the close of the event.

ELECTRICAL SAFETY AND HOLIDAY LIGHTING

- All electrical lights, electrical equipment, animated or electrical decorations must be UL listed.
- Manufacturer's instruction and precautions shall be followed.
- Each living group or office should have an appointed representative to ensure that the electrical decorations are de-energized at the end of the day.

Appendix C- *The Duke Community Standard in Practice: A Guide for Undergraduates - Appendix B- Optional One-time Faculty-Student Resolution Process for Cases of Academic Dishonesty Involving Undergraduates* (p. 67)[104] Reprinted with Permission.

APPENDIX B – OPTIONAL, ONE-TIME FACULTY-STUDENT RESOLUTION PROCESS FOR CASES OF ACADEMIC DISHONESTY INVOLVING UNDERGRADUATES

This option for resolving cases of academic dishonesty is reserved for first-time, minor infractions by Duke undergraduates. The faculty member must first contact the Office of Student Conduct to discuss the appropriateness of this option with respect to the nature of the offense, as well as to learn of any prior violations by the student. If there is no record of prior offenses and the case appears to be one that, if adjudicated by a hearing panel, would result in probation or a sanction less severe than probation, it may be resolved between the faculty member and the student. Otherwise, the case must be forwarded to the Office of Student Conduct.

A faculty-student resolution may result in a reduced grade on the assignment, a reduced grade in the course, additional assignments, and/or other educational initiatives. (The outcome must be agreed upon by both parties.)

The faculty member must report the outcome(s) of a faculty-student resolution to the Office of Student Conduct for record keeping. This resolution will not become part of the student's external disciplinary record unless there is a second violation, at which time both cases will be noted on the student's disciplinary record.

PROCESS

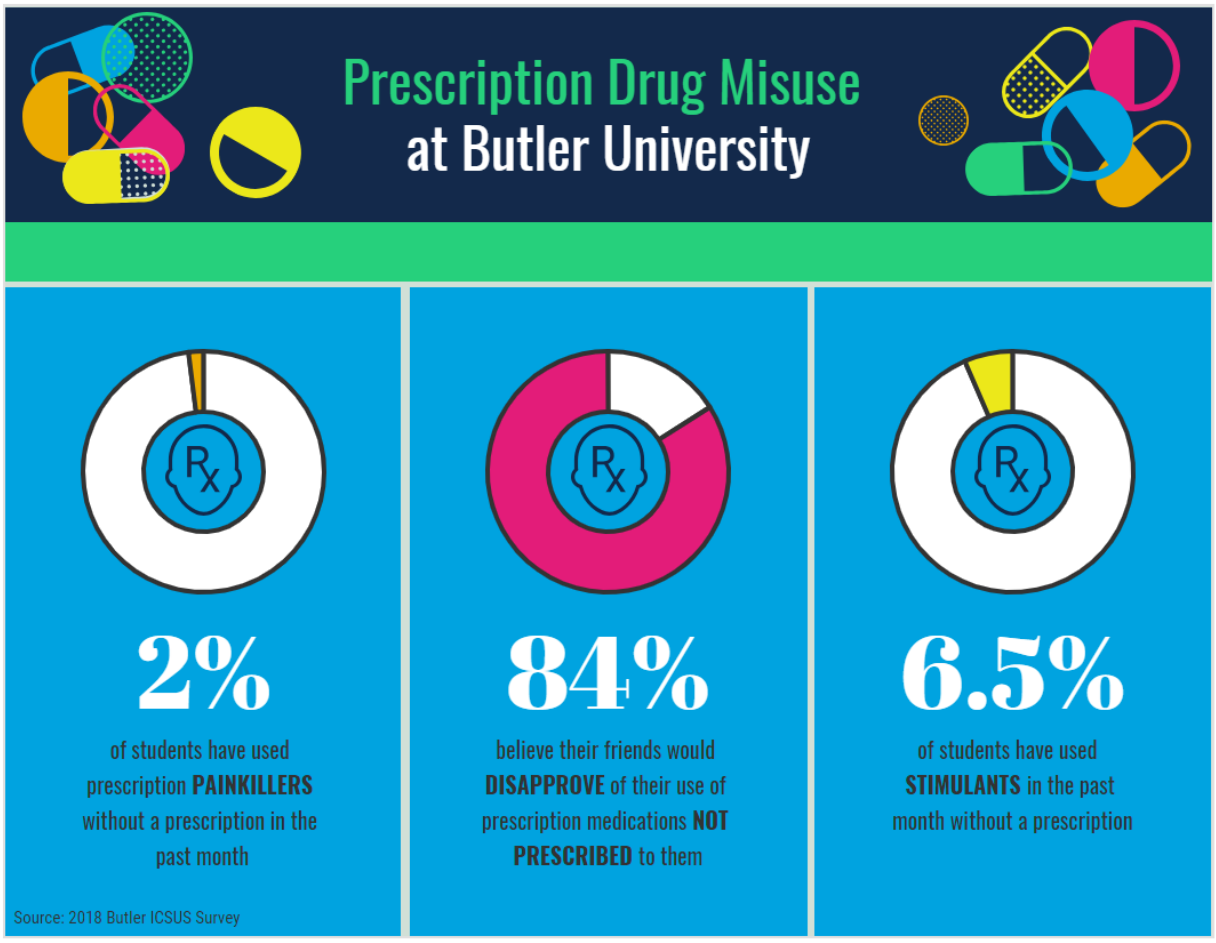
- The faculty member shall first contact the Office of Student Conduct to discuss the appropriateness of this option with respect to the nature of the offense, as well as to learn of any prior violations. Staff in the Office of Student Conduct may be reached at 919-684-6938.
- If the student has no record of prior offenses and the case appears to be one that, if adjudicated by a hearing panel, would result in probation or a sanction less severe than probation, it may be resolved between the faculty member and the student.
- The faculty member shall meet with the student and present any information relevant to the case.
- The student shall have an opportunity to respond to the allegations.
- If the faculty member believes that academic dishonesty has occurred, the faculty member should complete a Faculty-Student Resolution form, including the proposed outcome, and present this form to the student. The form may be found on the website of the Office of Student Conduct website at **studentaffairs.duke.edu/conduct/undergraduate-disciplinary-system/types-resolution/faculty-student-resolutions**.
- Upon receipt of the proposed resolution, the student has 96 hours to consider and seek advice on whether to accept responsibility and agree to the resolution.
- If the student agrees to the resolution, she/he should sign the resolution form in the presence of the faculty member. The faculty member should then forward a copy of the form to the Office of Student Conduct (Box 90893).
- If the student does not accept the proposed resolution, the faculty member should refer the case to the Office of Student Conduct.

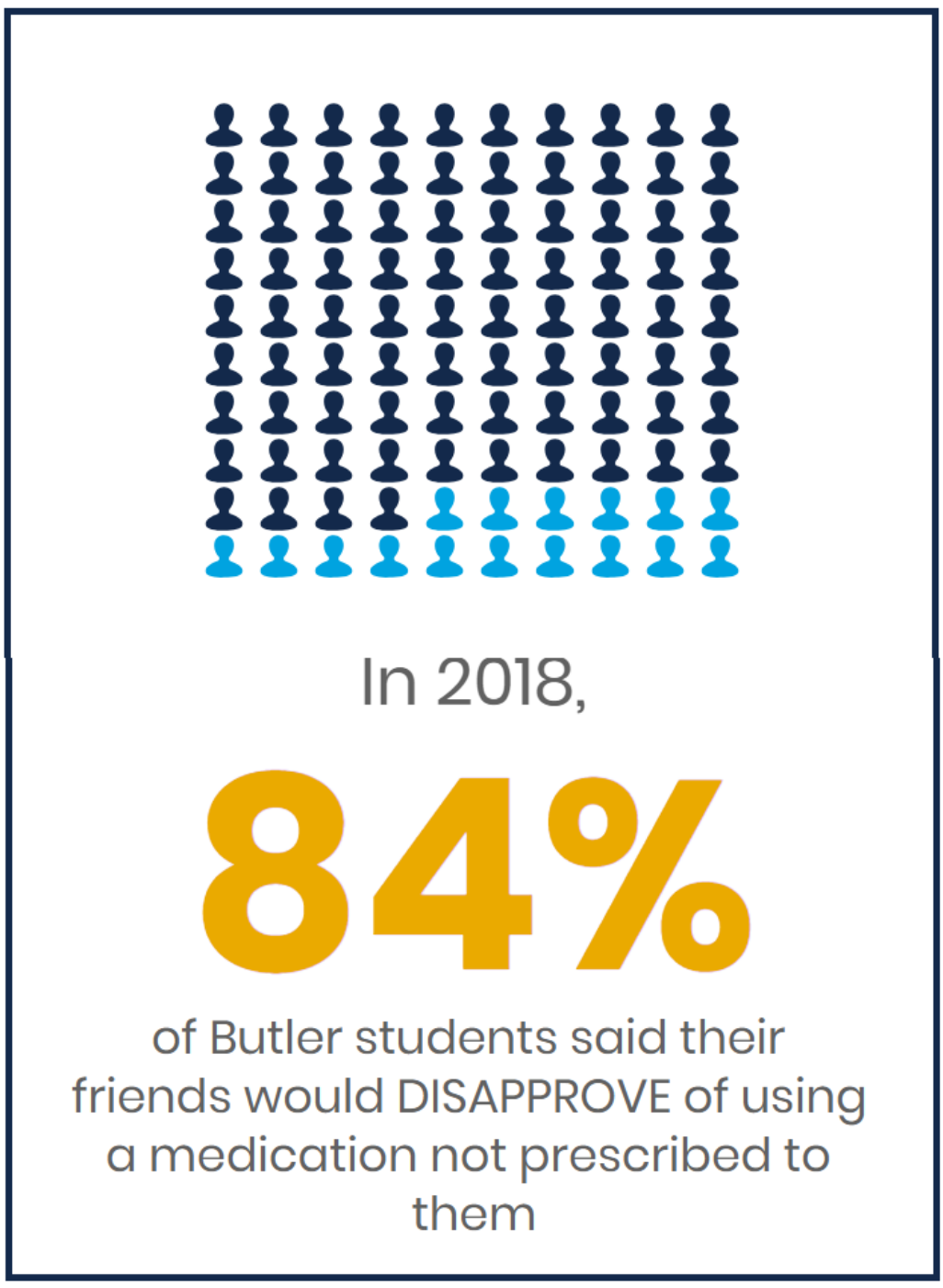
APPENDIX C – ADMINISTRATIVE ACTION POLICY

POLICY

The Vice President for Student Affairs or designee may take administrative action(s) against an undergraduate student (or, if pursuant to the Student Sexual Misconduct Policy or for an alleged violation of university policy which could be bias-/hate-related, a graduate or professional student) and/or a student group to protect the health, safety, or welfare of the university community or any member of it. Administrative action includes, but is not limited to, a "no contact" directive, removal of privileges, removal from or relocation within the residential community, suspension of activity, and/or suspension from the university. If administrative action is issued while a disciplinary action is pending, such action may remain in effect until the disciplinary process is resolved.

Appendix D- Example infographics based upon University specific data




In 2018,
84%
of Butler students said their friends would DISAPPROVE of using a medication not prescribed to them
SOURCE: 2018 Butler ICSUS

Appendix E- Example infographics for Safe Medication Storage, Refusal Strategies, and the Disposal of Medications

SAYING NO TO SHARING YOUR MEDS

Saying no is challenging especially if the person asking you for your medication is a friend. Being prepared with a response can help.

1 JUST SAY NO

A direct refusal is very clear. You can say just the one word or offer a bit more, such as *I cannot* or *I will not.*

2 TAKE A STANCE

Refuse on principle: *I never share my medication*
Refuse with philosophy: *One cannot be too careful*

3 HAVE AN EXCUSE, REASON, OR EXPLANATION

This should be truthful! For example you promised your doctor or parents you would not share your medicine, or if you share your medication with them you will not have enough for yourself

4 STATE AN ALTERNATIVE

Depending on the medicine the alternatives could vary. If they are struggling academically, study together! If your friend cannot relax or is struggling emotionally, maybe counseling could help. If they are in pain, have they gotten medical help?

5 STATE THE CONSEQUENCES

Be real. If you do not have your medicine, you won't do as well. If you share your medicine, you are BOTH committing a crime.

6 PHRASE IT LIKE A REGRET

It may be easier to say no by framing it as an apology first. *I wish I could share my medicine with you...* or *I realize this might cause some tension between us, but ...*

7 ADVOCATE IN YOUR OWN DEFENSE

Medicines are important! You need your medicine for YOU. Let them know that your medicine is a way for you to do and be your best and you would appreciate their help.

8 AVOIDANCE

This can be nonverbal or verbal. Nonverbal methods include *silence, hesitation, doing nothing,* and/or *leaving.* Verbal techniques can include *switching topics* or *making a joke.*

Source: The Center for Advanced Research on Language Acquisition (CARLA) at the University of Minnesota.
http://carla.umn.edu/speechacts/refusals/structure.html

Where to safely dispose of Medications

Sources: IN.gov Bitter Pill; FDA.gov

#1 Pharmacies

Walgreens , various stores
CVS, various stores

#2 Hospital Outpatient Pharmacies

Eskenazi Health Pharmacies at the Outpatient Care Center, Midtown, Westside, Cottage Corner, Forest Manor, North Arlington, West 38th Street

#3 Police Stations and Municipal Buildings

Marion County Sheriff's Department
Westfield Public Safety Building
Police Departments in Avon, Speedway, Plainfield, Beach Grove, Lawrence, Fishers, and Zionsville
NOT the Butler University Police Department

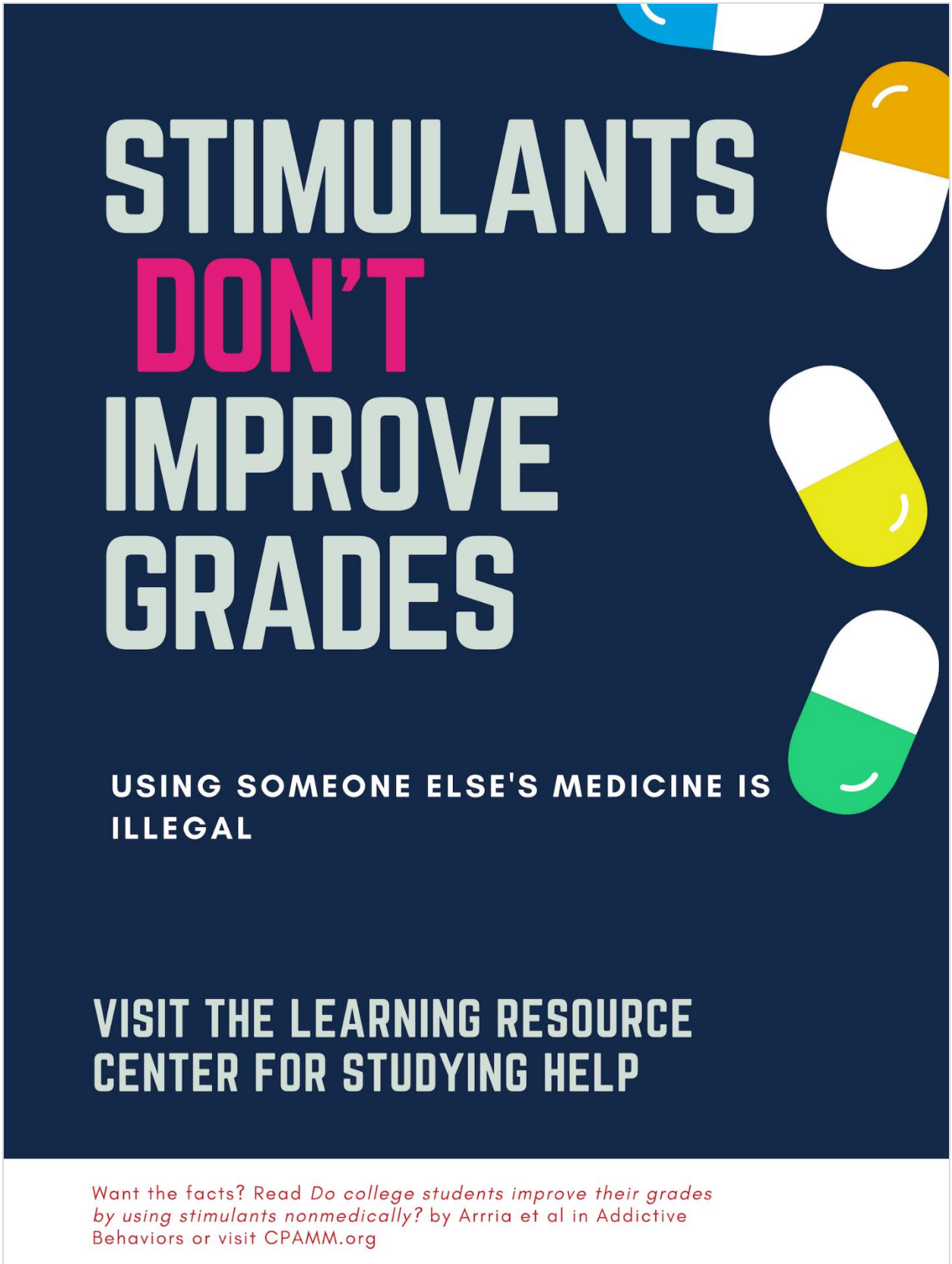
#4 Grocery Store Pharmacies

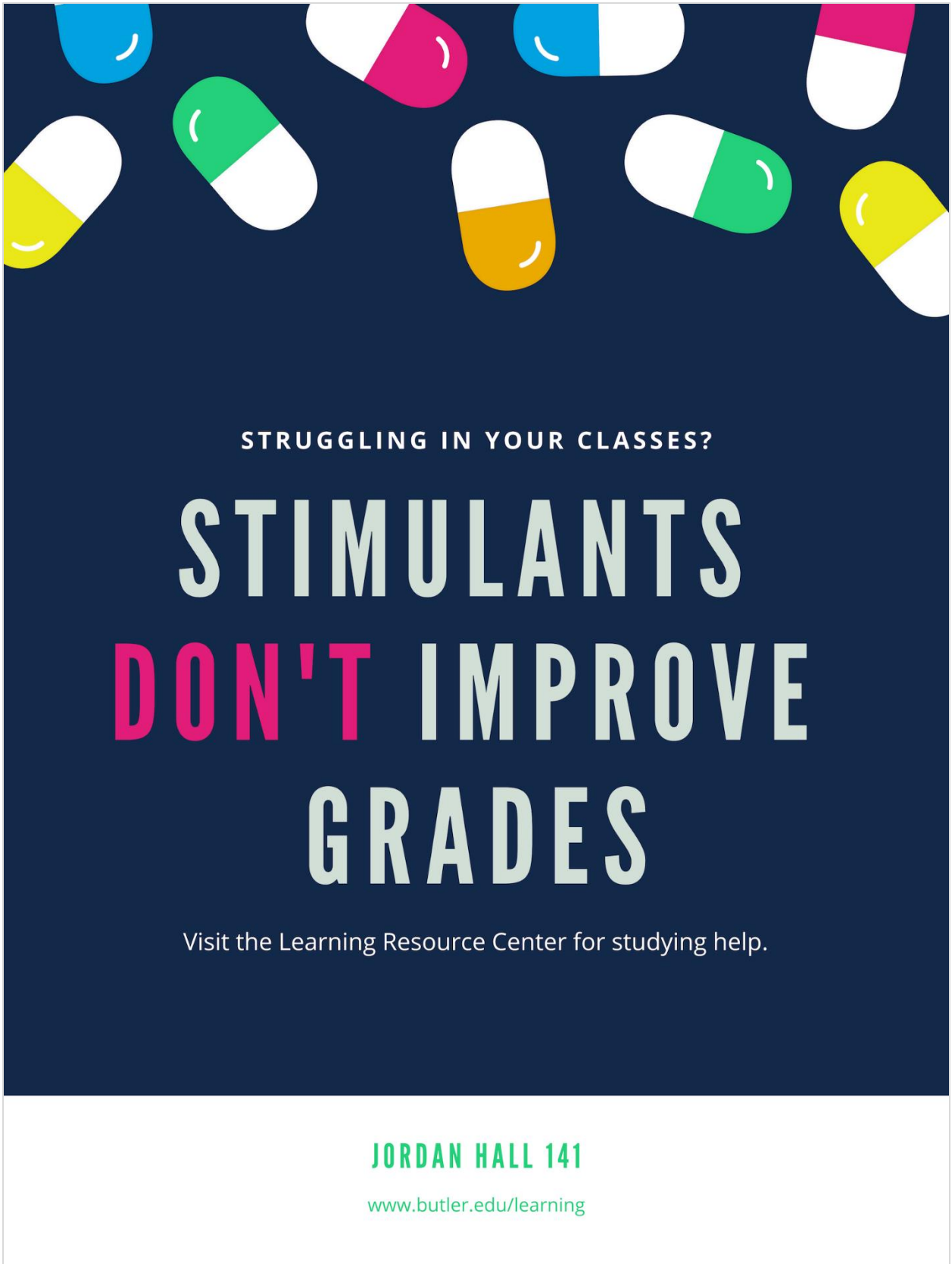
Meijer, various locations
Accepts non-liquid prescription and over-the-counter medications

#5 If all else fails, at home

Add the medication to kitty litter , dirt, or coffee grounds in a plastic bag and put it in the trash.

Appendix F- Example inforgraphics to promote awareness of laws and University policies, including “Let Us Be Clear” messaging


STIMULANTS
DON'T
IMPROVE
GRADES
USING SOMEONE ELSE'S MEDICINE IS ILLEGAL
VISIT THE LEARNING RESOURCE CENTER FOR STUDYING HELP
Want the facts? Read *Do college students improve their grades by using stimulants nonmedically?* by Arrria et al in Addictive Behaviors or visit CPAMM.org


STRUGGLING IN YOUR CLASSES?
STIMULANTS DON'T IMPROVE GRADES
Visit the Learning Resource Center for studying help.
JORDAN HALL 141
www.butler.edu/learning


LET US BE CLEAR:
ONLY THE PRESCRIPTION HOLDER CAN LEGALLY USE THEIR MEDICATION.
Buying, selling, manufacturing, or distributing a prescription medicine is illegal.
USING SOMEONE ELSE'S MEDICINE TO HAVE AN ACADEMIC, ATHLETIC, OR EMOTIONAL EDGE IS A CONDUCT VIOLATION.
Violating the law and University policy will result in consequences through the University's student conduct system as well as possible criminal prosecution.
butler.edu/student-handbook

Appendix G- *University of Delaware Referral Guidelines for Academic Honesty Violations.*[128] Reprinted with permission.

UNIVERSITY OF DELAWARE

Office of Student Conduct
218 Hullihen Hall
Newark, DE 19716

REFERRAL GUIDELINES for ACADEMIC HONESTY VIOLATIONS

"All students must be honest and forthright in their academic studies. To falsify the results of one's research, to steal the words or ideas of another, to cheat on an assignment, or to allow or assist another to commit these acts corrupts the educational process. Students are expected to do their own work and neither give nor receive unauthorized assistance. Any violation of this standard must be reported to the Office of Student Conduct" (http://www.udel.edu/stuguide).

Resources

Michael Fernbacher, Assistant Director, mikefern@udel.edu
Office of Student Conduct, 218 Hullihen Hall, 831-2116

Office of Student Conduct website: www.udel.edu/studentconduct
Student Guide to University Policies website: www.udel.edu/stuguide

Steps to follow when you suspect that a student has committed an act of academic dishonesty

1. Review the material to ensure that there is sufficient support for a charge of academic dishonesty.
2. Contact the Office of Student Conduct to determine the student's disciplinary history and to identify the appropriate option for the case.
3. Choose an Option (A, B, or C). Refer to the chart below and consider the criteria for each option. In addition, please consider:
   - How extensive is the problem?
   - How much is the assignment/exam worth?
   - Is it a major or minor assignment?
   - What does your syllabus say about how you will file cases of alleged academic honesty policy violations with the Office of Student Conduct?
   - What would the faculty member of another class section choose?
   - What is your department's policy/stance regarding academic dishonesty?
   - Do you need to consult with your supervisor/department chair?
4. Note that any student who has a prior incident of academic dishonesty must be brought in under Option C.
5. For cases involving multiple students, you may choose a different option and/or academic penalty for each of the students.
6. If you feel it necessary and are comfortable doing so, meet with the student(s) to inform them of the pending case of academic dishonesty. Let the student(s) know that the Office of Student Conduct will be in contact with them. You should continue to work with the student on other course requirements.
7. Provide the Office of Student Conduct with a report of the incident (click here to access the online reporting form) in order to start the student conduct process.
8. In addition to completing the form, please submit all supporting documents via the above form. In a plagiarism case, the case materials will ideally be a copy of the student's work and a copy of the text or website that the student's work matches. In a cheating case, the case materials will be a copy of each student's work - the student getting the help as well as the person giving the help. Please make every effort to provide the case materials within five (5) days of identifying the alleged violation.
9. If near the end of the term, assign the student an "I" grade until the case is resolved.

The Student Conduct Process

After all case materials arrive in the Office of Student Conduct, the student will be informed about the allegation, provided with a copy of the case materials along with the incident description submitted by you, and a list of the recommended sanctions. In addition to the academic penalty chosen by you, Office of Student Conduct staff will make recommendations for educational and disciplinary sanctions. Administrative actions will also be applied by the Office of Student Conduct. If the student accepts responsibility for the violation and the recommended sanctions, the case is closed and sanctions applied. If the student contests the case, you will need to participate in an administrative hearing process and/or appeal. The Office of Student Conduct staff will communicate case status and review hearing and appeal procedures with you as appropriate.

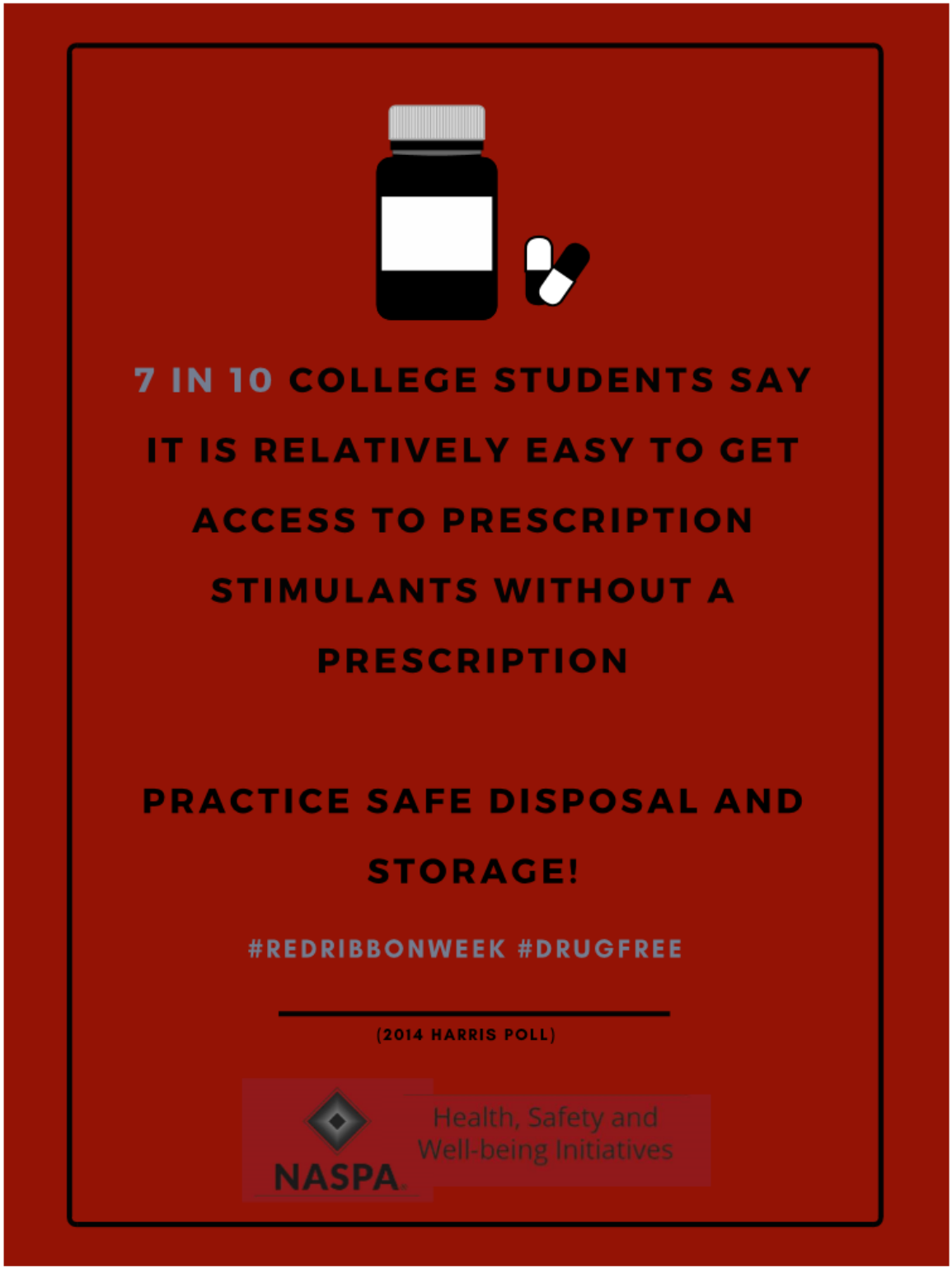
DETERMINING THE OPTION FOR AN ACADEMIC HONESTY VIOLATION

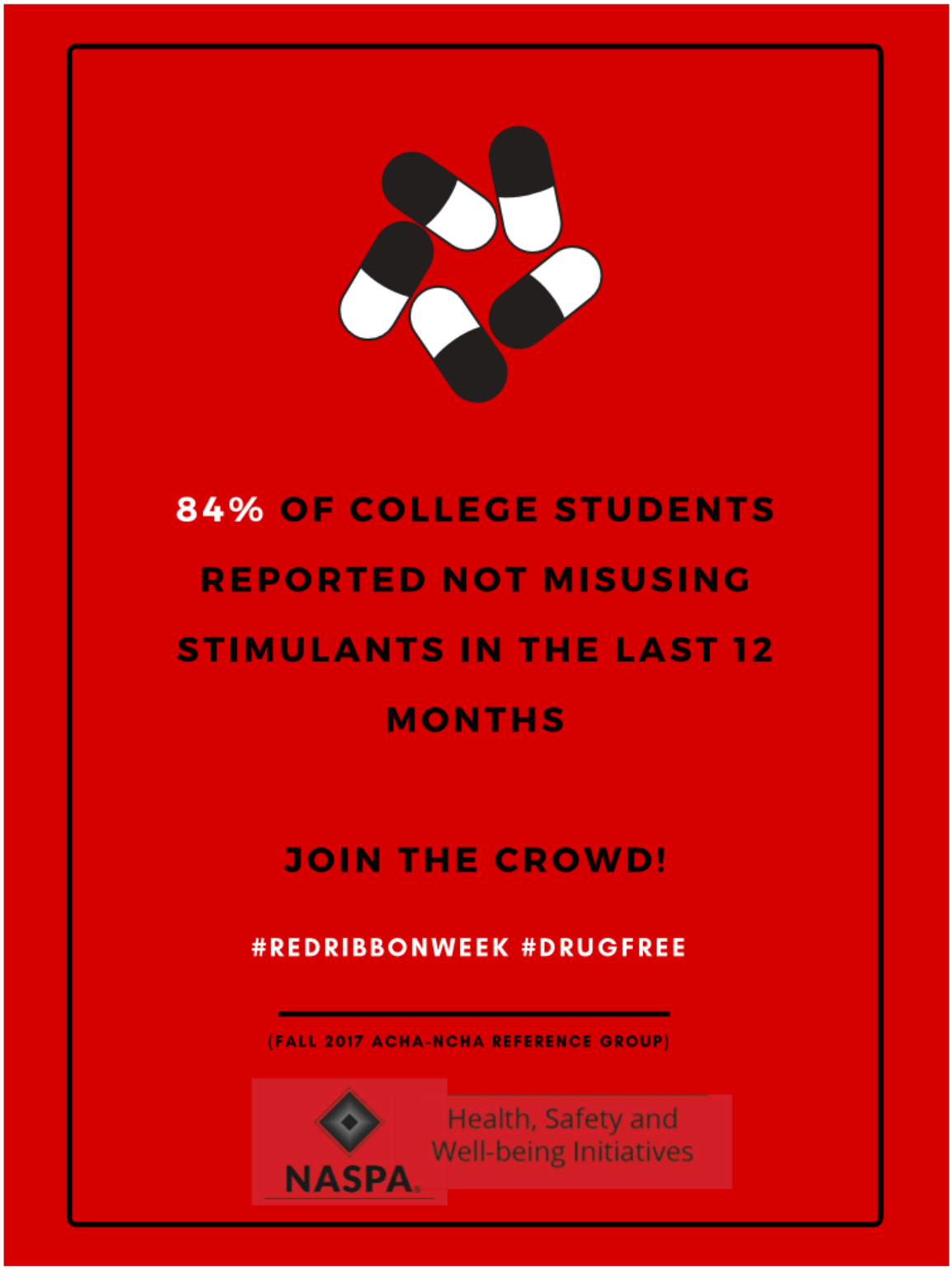
	OPTION A	OPTION B	OPTION C
Criteria (The incident can meet one or more of the criteria within an option.)	♦ 1%-15% dishonest ♦ Early in the semester ♦ Minor assignment[1] ♦ Teaching assignment[2] ♦ First writing assignment requiring use of sources	♦ 15%-85% dishonest ♦ Mid-way into semester ♦ Significant assignment[1] ♦ Skill-building assignment[2] ♦ Student has submitted and received feedback on at least one writing assignment requiring use of sources within the course ♦ Unauthorized assistance on an assignment or during a test or quiz	♦ 85%-100% dishonest ♦ Later in the semester ♦ Major assignment[1] ♦ Proficiency assignment[2] ♦ Student has submitted and received feedback on a number of other writing assignments requiring use of sources within the course ♦ Final paper/final exam ♦ Paper retrieved/purchased from a paper mill site. ♦ Significant fabrication of sources ♦ Multiple students have nearly identical papers ♦ Unauthorized assistance on a major assignment or during a major exam ♦ Student has had a prior academic honesty violation
Academic Penalty (Chosen by the faculty member.)	♦ Re-do the work either with or without academic penalty	♦ Lower or failing grade on the assignment ♦ Lower or failing grade in the course ♦ Removal from the course (withdrawal from the course without penalty)	♦ Grade of X[3] - failure of course with a notation on the transcript that indicates the failure was due to academic dishonesty
Educational Sanction[4] (Chosen by OSC)	♦ Reflective paper ♦ Academic Honesty Awareness Program ♦ Academic Integrity Seminar	♦ Reflective paper ♦ Academic Honesty Awareness Program ♦ Academic Integrity Seminar	♦ Reflective paper ♦ Academic Honesty Awareness Program ♦ Academic Integrity Seminar
Disciplinary Sanction[5] (Chosen by OSC)	♦ Disciplinary Warning ♦ Notice of Reprimand ♦ Disciplinary Probation	♦ Disciplinary Probation ♦ Deferred Suspension from the University	♦ Deferred Suspension from the University ♦ Suspension from the University ♦ Expulsion from the University
Administrative Actions[6]	♦ Fee ♦ Parental Notification	♦ Fee ♦ Parental Notification	♦ Fee ♦ Parental Notification ♦ Notation on transcript that student was withdrawn from the University (Suspension or Expulsion only)

[1] Consider the point value of the assignment as it relates to the course grading system.
[2] Consider the goal of the assignment.
- A teaching assignment should teach a new skill and allow a student to learn the process. Consider whether the violation is due to dishonesty or skill deficiency. Skill deficiency is not a student conduct violation and should be resolved in the classroom through remedial help.
- A skill-building assignment assumes a student has the basic skill base and challenges him/her to further apply the skill.
- A proficiency assignment allows a student to demonstrate mastery of a skill.

[3] The student can choose to complete the Academic Integrity Seminar and have the "X" notation removed from his/her transcript and replaced with an "F" grade.
[4] Faculty may recommend one of these, or they may be assigned as part of the overall sanctioning package. Reflective papers may be on a variety of topics. The Academic Honesty Awareness Program is a Sakai-based independent-study style intervention. The Academic Integrity Seminar is an 8-week in-class seminar.
[5] The current incident as well as the student's previous disciplinary record, if any, is reviewed in determining the appropriate disciplinary sanctions. If the student contests the case, the final decision regarding disciplinary sanctions will be made by the hearing officer and/or the Appellate Board.
[6] Fees range from $100-$250, depending on the type of educational sanction assigned. Parent notification occurs when the when the disciplinary sanction is Deferred Suspension, Suspension or Expulsion.

Appendix H: NASPA National Red Ribbon Week Posters.[130] Reprinted with permission.




84% OF COLLEGE STUDENTS REPORTED NOT MISUSING STIMULANTS IN THE LAST 12 MONTHS
JOIN THE CROWD!
#REDRIBBONWEEK #DRUGFREE
(FALL 2017 ACHA-NCHA REFERENCE GROUP)
NASPA
Health, Safety and Well-being Initiatives

1

HEALTH EFFECTS OF RX MISUSE

- Increase in blood pressure
- Increase in heart rate
- Seizures
- Stroke
- Difficulty breathing
- Organ damage
- Drug addiction
- Death

WAYS TO PREVENT RX MISUSE

Dispose expired and unused prescription medications appropriately (i.e. Utilize the Montana Pharmacy Safe Medication Disposal Initiative)

Never use another person's prescription, never give your prescription medications to others, and store your prescriptions safely

Do not stop or change your dose regimen without discussing it with a doctor

PRESCRIPTION DRUG MISUSE

DID YOU KNOW?

The majority of college students (84%) do not misuse or abuse prescription medication.

(Fall 2017 NCHA-ACHA Reference Group)

#RedRibbonWeek
#DrugFree

Appendix I- CPAMM Parent and Caregiver Guides for Students With ADHD.[129] Reprinted with permission.

PARENTS, CAREGIVERS & YOUR COLLEGE STUDENT'S ADHD PRESCRIPTION STIMULANT MEDICATION

TOGETHER WE CAN HELP PREVENT MISUSE

College students sometimes misuse prescription stimulant medication to deal with stress; the majority of the supply comes from a friend with a valid prescription.[1] In fact, research shows that 61.7% of college students with ADHD report having diverted their prescription stimulant medication.[2] Some may feel pressured to share or sell their medication, but others are sharing or selling willingly.

POTENTIAL CONSEQUENCES OF PRESCRIPTION STIMULANT MEDICATION MISUSE

Many universities consider misuse cheating, which can lead to academic probation or expulsion, for both the misuser and the diverter.[3] It's also a felony to share or sell a Schedule II controlled substance, like ADHD prescription stimulant medication, for any reason, which could make it harder for your student to continue their education, get into grad school or secure employment after college.

Like all prescription medications, your student's ADHD prescription stimulant medication comes with potential side effects and should only be used under medical supervision.[4] That's why sharing or selling isn't safe and why prescriptions need to be monitored and carefully regulated by a physician. Plus, when students who don't have ADHD take ADHD prescription stimulant medication, it trivializes the condition.

TIPS TO HELP YOUR STUDENT PROTECT THEIR MEDICINE

- Take your medication as prescribed by your doctor
- Don't carry extra pills with you
- Keep your prescription in a safe location, preferably locked
- Take your medication when you're alone so no one can ask you to share
- Count the pills to make sure no one else is taking them between doses
- Your diagnosis is personal, and you have the right to keep it private

WHAT YOUR STUDENT CAN SAY IF ASKED TO SHARE OR SELL

- "ADHD is a real medical condition and I need all of my medication"
- "My doctor monitors my prescription"
- "I'm running low"
- "My prescription is tailored to my needs and is unsafe to share"
- "Misusing won't improve your grades[5] or help you understand subject matter any better or faster"[6]

Finally, encourage your student to motivate friends in a positive way. Tell them to share healthy study habits, and if a friend thinks they may have ADHD, urge them to seek help.

TALKING WITH YOUR COLLEGE STUDENT CAN HELP PREVENT THE MISUSE, ABUSE, AND DIVERSION OF THEIR PRESCRIPTION STIMULANT MEDICATION.

1. Source: McCabe SE, West BT, Teter CJ, Boyd CJ. Trends in medical use, diversion and nonmedical use of prescription medications among college students from 2003 to 2013: connecting the dots. *Addict Behav*. 2014;39(7):1176-82. doi:10.1016/j.addbeh.2014.03.008.
2. Source: Garnier LM, Arria AM, Caldeira KM, Vincent KB, O'Grady KE, Wish ED. Sharing and selling of prescription medications in a college student sample. *J Clin Psychiatry*. 2010;71(3):262-9. doi:10.4088/JCP.09m05189ecr.
3. Source: Carroll L. Conduct policy changes reflect drug abuse. *The Chronicle*. September 6, 2011. http://www.dukechronicle.com/article/2011/09/conduct-policy-changes-reflect-drug-abuse. Published September 6, 2011. Accessed December 19, 2017.
4. Source: Commonly abused drugs charts. NIDA: National Institute on Drug Abuse website. https://www.drugabuse.gov/drugs-abuse/commonly-abused-drugs-charts. Published January 2016. Updated July 2017. Accessed November 7, 2017.
5. Source: Arria AM, Caldeira KM, Vincent KB, et al. Do college students improve their grades by using prescription stimulants nonmedically? *Addict Behav*. 2016. doi:10.1016 /j.addbeh.2016.07.016. Epub 2016 Jul 19.
6. Source: McCabe SE, Knight JR, Teter CJ, Wechsler H. Non-medical use of prescription stimulants among US college students: prevalence and correlates from a national survey. *Addiction*. 2005;100(1):96-106.

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Appendix J- CPAMM Parent and Caregiver Guides for Students Without ADHD.[129] Reprinted with permission.

A PARENT AND CAREGIVER'S GUIDE TO TALKING TO YOUR COLLEGE STUDENT ABOUT ADHD PRESCRIPTION STIMULANT MEDICATION

YOU CAN HELP PREVENT MISUSE

College students are often stressed by competing academic, social and work priorities, and some students believe it's okay to misuse prescription stimulant medication to try and boost their academic performance[1]. Unfortunately, one in six parents believes using prescription drugs to get high is "much safer" than using illicit drugs according to the 2013 Partnership Attitude Tracking Study.[2] But many students may not be aware of the academic, legal and medical consequences of misuse. That's why, as an important influencer in your student's life, we encourage you to speak up and talk with your student about healthy ways to manage college stress so they are less likely to misuse prescription stimulant medication.

POTENTIAL CONSEQUENCES OF PRESCRIPTION STIMULANT MEDICATION MISUSE

If your student is not diagnosed with ADHD, prescription stimulants won't help them think more clearly or understand subject matter any better or faster[3], and a recent study shows that it won't improve their grades.[4] In fact, prescription stimulant medication misuse comes with potential side effects that could put your student's health and safety at risk.[5] Plus, many universities consider misuse cheating, which can lead to academic probation or expulsion.[6] It's also a felony to share or sell a Schedule II controlled substance, like prescription stimulant medication, which could make it harder for your student to continue their education, get into grad school or secure employment after college.

HEALTHY WAYS TO AVOID STRESS

- Form study groups with other students
- Seek help from professors, teaching assistants and academic advisors
- Visit the campus learning center
- Organize a to-do list or calendar with realistic goals and timing
- Study a little each day to avoid all-nighters and cramming
- Exercise to reduce tension and increase energy
- Have healthy foods, snacks and drinks during long work sessions
- Take breaks and spend time with friends

TIPS TO HELP YOU STAY CONNECTED

One mental health college study showed that 63% of students said they would turn to family if they were in emotional distress.[7] Touch base frequently so you always know how your student is doing. Ask if they're feeling stressed and remind them it's normal. Explain that a little stress can be a great motivator, but to reach out if they ever feel overwhelmed. You can get the conversation going with simple questions like:

- Do you like your dorm?
- Are you getting along with your roommate?
- How are you feeling about your classes?
- Does the number of credits you're taking seem manageable?
- What's the social scene like on campus?

OFFER ENCOURAGEMENT

As a parent or caregiver, you are a major influence for your student, and just being there to provide reassurance and offer advice will help your student succeed. Tell them, "You've got this," and that they can succeed on their own merit. Remind them they've come this far and that you'll be there if they ever need support. Acknowledge the efforts they make and reassure them that you're more concerned with their well-being than their grades.

If you sense your student may be struggling with their emotions or mental health, encourage them to seek out campus resources, such as counseling and health services, for professional help and support. Additionally, you can both visit The JED Foundation at jedfoundation.org/parents for support and resources regarding mental health on college campuses, and check out their ULifeline at ulifeline.org for more tips on how to manage study stress.

TALKING WITH YOUR COLLEGE STUDENT CAN HELP PREVENT THEM FROM MISUSING AND ABUSING PRESCRIPTION STIMULANT MEDICATION.

1. Source: McCabe SE, West BT, Teter CJ, Boyd CJ. Trends in medical use, diversion, and nonmedical use of prescription medications among college students from 2003 to 2013: connecting the dots. *Addict Behav*. 2014;39(7):1176-82. doi:10.1016/j.addbeh.2014.03.008.
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3. Source: McCabe SE, Knight JR, Teter CJ, Wechsler H. Non-medical use of prescription stimulants among US college students: prevalence and correlates from a national survey. *Addiction*. 2005;100(1):96-106
4. Source: Arria AM, Caldeira KM, Vincent KB, et al. Do college students improve their grades by using prescription stimulants nonmedically? *Addict Behav*. 2016. doi:10.1016 /j.addbeh.2016.07.016. Epub 2016 Jul 19.
5. Source: Commonly abused drugs charts. NIDA: National Institute on Drug Abuse website. https://www.drugabuse.gov/drugs-abuse/commonly-abused-drugs-charts. Published January 2016. Updated July 2017. Accessed November 7, 2017.
6. Source: Carroll L. Conduct policy changes reflect drug abuse. *The Chronicle*. September 6, 2011. http://www.dukechronicle.com/articles/2011/09/06/conduct-policy-changes-reflect-drug-abuse. Published September 6, 2011. Accessed December 19, 2017.
7. Source: mtvU. 2006 mtvU college mental health study: stress, depression, stigma & students: executive summary. http://cdn.halfofus.com/wp-content/uploads/2013/10/2006-mtvU-College-Mental-Health-Study-Executive-Summary-Final.pdf. Accessed December 19, 2017.

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